12034 Environmental Liabilities for Federal Managers

Training Manager: AMA-400   Course Length: 1 hour(s)

This course provides training for managers and supervisors on personal liabilities relating to environmental laws. The course is 100% videotape. Subjects include the Environmental Protection Agency laws, National Environmental Policy Act, violations of these laws, and results of violations which can result in substantial fines and possible imprisonment for willful negligence acts.

Prerequisites: None
And one of the following: None

12400 (CBI) A+ Revised Operating Systems Technologies

Training Manager: AMA-480   Course Length: 44 hour(s)

This course teaches the installation, configuration, and troubleshooting of DOS and Windows-based PC's. This course covers file systems, devices and drivers, and basic DOS/Windows networking capabilities.

Prerequisites: None
And one of the following: None

12600 Awareness of Lockout/Tagout Procedures

Training Manager: AMA-400   Course Length: 4 hour(s)

This course provides awareness-level training for employees who service and maintain FAA potentially hazardous energy (PHE) equipment. It is also for those who operate PHE equipment or supervise or inspect employees who service, maintain and/or operate PHE. The course is 85% field lecture and 15% videotape with a student guide. It describes the purpose and function of the FAA's Hazardous Energy Control Program in accordance with 29 CFR 147; 29 CFR 1960; FAA orders 3900.19a, 3900.6a; 3900.49; and Draft 3900.xxx, appendix 3.

Prerequisites: None
And one of the following: None

12601 Applications of Lockout/Tagout Procedures

Training Manager: AMA-400   Course Length: 4 hour(s)

This course provides authorized employees hands on experience in the application of lockout/tagout devices to potentially hazardous energy (PHE) equipment. The course is 10% lecture and 90% lab. The material is in accordance with OSHA 29 CFR 1910.147 and 1960, FAA Orders 3900.19A, 3900.6A, Draft 3900.xxx, Appendix 3, and 3900.49.

Prerequisites: 12600
And one of the following: None

12602 Resident Engineer - Fire Life Safety (FLS)

Training Manager: ANS-500   Course Length: 24 hour(s)

This course provides training for resident engineers who are overseeing FLS upgrades at ATCT's to inspect and accept the installation of fire life safety equipment and related features. Subjects include overview of alternate emergency standards for airport traffic control towers, basic fire protection/life safety codes, systems features, components, and fire protection procedures.

Prerequisites: None
And one of the following: None

12603 ATCT Fire Protection System Maintenance

Training Manager: AMA-400   Course Length: 32 hour(s)

This course is for technicians that manage facility fire protection at their work sites. The course is 16 hours lecture and 16 hours laboratory and focuses on eight essential areas of facility fire protection that personnel will encounter on a regular basis. Lecture subjects include CFR 1960.20, smoke management systems, fire alarm systems, fire alarm circuits, fire stopping, fire alarm panel operations, fire suppression systems, fire alarm tests, and warranties and specifications. Laboratory subjects include operation of systems circuits and maintenance.

Prerequisites: None
And one of the following: None

12604 (CBI) OSHA 600 Collateral Duty Safety and Health

Training Manager: AMA-400   Course Length: 32 hour(s)

This course provides training for personnel assigned collateral safety and health duties and covers various OSHA safety inspection topics. This course is 32 hours computer-based instruction (CBI). There is no end-of-course exam.

Prerequisites: None
And one of the following: None

12605 (CBI) Safety Review for FAA Supervisors

Training Manager: AMA-400   Course Length: 2 hour(s)

This course provides training for supervisors on the supervision of OSHA requirements at a worksite. This course is 2 hours computer-based instruction. There is no end-of-course exam.

Prerequisites: None
And one of the following: None

12606 NAS System Technical Evaluation Program (NASTEP)

Training Manager: AMA-400   Course Length: 56 hour(s)

This course provides training for technical evaluators on the National Airspace System Technical Evaluation Program (NASTEP). The course is 28 hours lecture and 28 hours laboratory. Lecture subjects include a NASTEP overview and concepts, pre-evaluation activities, report writing, and post-evaluation activities. Lab subjects include a software demo, site visits, customer interviews, and entrance/exit briefings. Students must bring a laptop.

Prerequisites: 12607
And one of the following: None

12607 Intro to NASTEP

Training Manager: AMA-400   Course Length: 8 hour(s)

This course provides training for technical evaluators on the National Airspace System Technical Evaluation Program (NASTEP). This course is 8 hours correspondence study. Subjects include NASTEP guidelines and FAA Order 6040.6X.

Prerequisites: None
And one of the following: None

12608 Defensive Driving: A Crash Course

Training Manager: AMA-400   Course Length: 1 hour(s)

This course teaches airway facilities personnel defensive driving techniques. This course is a 2-hour videotape. Subjects include the rules of driving with an emphasis on defensive driving techniques and illustrations of what a driver can do to avoid accidents.

Prerequisites: None
And one of the following: None

12609 Minimum Training for OSHECCOM Members

Training Manager: AMA-400   Course Length: 2 hour(s)

This course provides minimum training requirements for OSHECCOM members. This course is 2 hours field lecture and is conducted at regional, headquarter, Technical Center, and Aeronautical Center locations. Subjects include Executive Order 12196, OSHA Program, 29 CFR 1960, Basic OSHA Program, 29 CFR 1910, General Industry Requirments, 29 CFR 1926, Construction Industry Standards, environmental compliance, and duties and responsibilities of OSHECCOM members.

Prerequisites: None
And one of the following: None

12610 (CBI) Environmental Due Diligence Audit (EDDA)

Training Manager: AMA-405   Course Length: 16 hour(s)

This course covers instructions for FAA personnel to prepare for an Environmental Due Diligence Audit. This course is 16 hours of computer-based instruction (CBI). Specific topics include guidance for management decision-making with EDDA and protecting the agency from environmental liability.

Prerequisites: None
And one of the following: None

12622 ARTCC Fire Protection Systems Maintenance

Training Manager: AMA-405   Course Length: 32 hour(s)

This course provides training to airway facilities technicians on ARTCC Fire Protection System maintenance. This course is 16 hours Academy lecture and 16 hours Academy laboratory. Lecture subjects include a description and purpose of system components, code requirements, testing criteria, and maintenance of systems. Lab subjects include the application of troubleshooting methodologies, operation of the control panel, testing procedures, repairs, and operation of the VESDA System and Viking Firecycle III System.

Prerequisites: None
And one of the following: None

12623 Fall Protection Basic Awareness

Training Manager: AMA-405   Course Length: 4 hour(s)

This course provides training for AF technicians, engineers, FAA Technical Center personnel, and air traffic control specialists on fall protection basic awareness. This course is 2 hours field lecture and 2 hours field laboratory. Lecture subjects include elements of fall hazards in the work area, procedures for fall protection, hazard identification on ladders and elevated surfaces, handling and storage of fall protection equipment, and PPE. Lab subjects include consequences of improper use of fall protection equipment, equipment demonstration, proper harness attachment, and proper attachment methods.

Prerequisites: None
And one of the following: None

12624 Fall Protection-Expert Climber

Training Manager: AMA-405   Course Length: 24 hour(s)

This course provides training for AF technicians, engineers, FAA Technical Center personnel, and air traffic control specialists on fall protection for expert climbers. This course is 12 hours field lecture and 12 hours field laboratory. Lecture subjects include workplace hazard awareness and identification, handling, inspection and storage of fall protection equipment, and basic awareness of rescue

procedures. Lab subjects include the demonstration of the use of fall protection equipment, demonstration of proper attachment points on harness and proper attachment methods, consequences of improper use of harness, identification and use of tie-offs for work positioning, and performing a climb greater than 50 feet.

Prerequisites: None
And one of the following: None

12625   Fall Protection-Competent Person

Training Manager: AMA-405   Course Length: 24 hour(s)

This course provides training for AF technicians, engineers, and FAA Technical Center personnel on fall protection-competent person. This course is 12 hours field lecture and 12 hours field laboratory. Lecture subjects include the nature of fall hazards in the work area, knowledge of the hierarchy of controls, workplace hazard awareness and identification, procedures for handling, inspecting, and storage of fall protection equipment, procedures for erecting, maintaining, dissassembling, and inspecting fall arrest systems. Lab subjects include vertical and horizontal lifetime selection and use, performing an advanced climb, self retracting lifelines, and basic rescue operations.

Prerequisites: None
And one of the following: None

12626   (CBI) Environmental Due Diligence Audit (EDDA) for Managers

Training Manager: AMA-405   Course Length: 16 hour(s)

This course covers instructions for FAA management personnel to prepare for an environmental due diligence audit. This course is 16 hours of computer-based instruction (CBI). Specific topics include guidance for management decision-making with EDDA and protecting the agency from environmental liability.

Prerequisites: None
And one of the following: None

12627   (CBI) Workers Compensation for Employees (OWCP)

Training Manager: AMA-405   Course Length: 8 hour(s)

This course provides data by the Office of Workers' Compensation Programs (OWCP) for employees injured on the job. Topics include workers' compensation coverage, forms required for requesting benefits, timelines to claim benefits, compensation for injuries, and getting back to work.

Prerequisites: None
And one of the following: None

12628   (CBI) Supv Responsibility for Workers' Comp Program (OWCP)

Training Manager: AMA-405   Course Length: 8 hour(s)

This course identifies supervisory responsibilities regarding the Office of Workers' Compensation Programs (OWCP). Topics include regulations for OWCP, basic disability benefits, determining the validity of a workers' compensation claim, timeline requirements, long-term disabililty, and getting employees back to work.

Prerequisites: None
And one of the following: None

12700   (CBI) General Safety, Health, and Environmental Awareness

Training Manager: AMA-400   Course Length: 24 hour(s)

This is a general safety awareness CD ROM containing the Environmental Protection Agency's, Safety, Health, and Environmental Division's (SHED) basic course for safety and health inspectors. It is composed of seven general categories and 34 computer-based training modules.

Prerequisites: None
And one of the following: None

12701   (CBI) National Airspace System

Training Manager: AMA-405   Course Length: 8 hour(s)

This course provides training to all personnel on the National Airspace System (NAS). The course is 100% computer-based instruction (CBI). Subject areas include DOT organization, FAA organization, funding, regulation and certification, airports, airway facilities, flight service, terminal/en route, traffic management, weather, using the NAS, and the capital improvement plan (CIP).

Prerequisites: None
And one of the following: None

12709   (CBI) FAA Technical On-Site Representative (TOR)

Training Manager: AMA-405   Course Length: 12 hour(s)

This course is for FAA personnel who will be technical on-site representatives (TOR). This course is 12 hours computer-based instruction. Subjects include TOR responsibilities, installation documentation, coordination of installation activities, contractor acceptance inspection (CAI), JPINT acceptance inspection (JAI), and handling exceptions.

Prerequisites: None
And one of the following: None

12723 (CBI) Airport Ground Vehicle Operations

Training Manager: AMA-405 Course Length: 2 hour(s)

This course provides airfield driver training for FAA employees w ho must drive unescorted on any airfield of any airport. The course is 100% computer-based training, administered on the Internet. Subjects include identification of signs and markings w hen driving on the airport, communication using the correct aviation phraseology, and identifying controller light signals.

Prerequisites: None
And one of the following: None

12753 (CBI) Basic Telecommunications

Training Manager: AMA-480 Course Length: 8 hour(s)

This is the first of tw o courses of instruction in telecommunications fundamental and basic techniques involved in modern communications practices.

Prerequisites: None
And one of the following: None

12754 (CBI) Advanced Telecommunications

Training Manager: AMA-480 Course Length: 25 hour(s)

This is the second and more advanced of tw o courses of instruction in telecommunications. Advanced subjects include computer telephony integration. Voice over IP and packetized voice netw orking. Also included is an introduction to ISDN, protocols, and ISDN D-channel.

Prerequisites: None
And one of the following: None

12755 (CBI) A+ Revised* Core Hardware

Training Manager: AMA-480 Course Length: 19 hour(s)

This course covers PC configuration, PC diagnostics and repair, netw orking support, and maintenance and safety. This course used in conjunction w ith 12400, A+ Revised* Operating Systems Technologies.

Prerequisites: None
And one of the following: None

12756 (CBI) Operating Systems, DOS and Windows

Training Manager: AMA-480 Course Length: 34 hour(s)

This course teaches the installation, configuration, and troubleshooting of DOS and Window s-based PCS. This course covers file systems, devices and drivers, and basic DOS/Window s netw orking capabilities.

Prerequisites: None
And one of the following: None

12757 (CBI) Operating Systems, Linux

Training Manager: AMA-480 Course Length: 16 hour(s)

This series of topics introduces basic Linux. Topics include system fundamentals, file management and configuration.

Prerequisites: None
And one of the following: None

12758 (CBI) Operating Systems, Solaris 2.X

Training Manager: AMA-480 Course Length: 58 hour(s)

This series of topics introduces the student to basic Solaris 2.X. Topics include system administration, user set-up, security, file management, and job control.

Prerequisites: None
And one of the following: None

12760 (CBI) Network Devices

Training Manager: AMA-480 Course Length: 43 hour(s)

This series of topics introduces the student to basic netw orking and devices. Topics include router configuration and management, VLANS, IP routing, and netw ork concepts and devices. This series is Cisco based as representative of the general class of industry standard devices.

Prerequisites: None
And one of the following: None

12761 (CBI) Operating Systems, HP-UX

Training Manager: AMA-480 Course Length: 10 hour(s)

This series of topics introduces basic HP-UX. This series w ill cover the essentials of HP-UX as w ell as file management and job control.

Prerequisites: None
And one of the following: None

12762 (CBI) Operating Systems, UNIX

Training Manager: AMA-480 Course Length: 32 hour(s)

This series of tpoics introduces basic UNIX. This series covers the

UNIX file system, shells, the user environment, and using basic editors and utilities.

Prerequisites: None
And one of the following: None

14600 Occupational Safety for Supervisors

Training Manager: AMA-400 Course Length: 3 hour(s)

This course provides training for supervisors concerning their responsibilities for maintaining safety in the workplace. The course is 100% correspondence study, utilizing a short video which identifies some noncompliance situations. Subjects include standards; how to plan and conduct a safety check; and how to report hazards, incidents, and unsafe conditions.

Prerequisites: None
And one of the following: None

14602 Awareness of Lockout/Tagout Procedures

Training Manager: AMA-400 Course Length: 3 hour(s)

This course provides awareness-level training for employees who service and maintain FAA potentially hazardous energy (PHE) equipment. It is also for those who operate PHE equipment or for those who supervise or inspect employees who service, maintain, and/or operate PHE. It describes the purpose and function of the FAA's Hazardous Energy Control Program in accordance with 29 CFR 1910.147; 29 CFR 1960; FAA Orders 3900.19A, 3900.6A, 3900.49, and Draft Order 3900.xxx, Appendix 3. This course is 85% correspondence study and 15% videotape 'Controlling the Beast'.

Prerequisites: None
And one of the following: None

14640 Awareness of Hazard Communication Procedures

Training Manager: AMA-400 Course Length: 3 hour(s)

This course provides awareness-level training for employees who work with or may work with hazardous chemicals. It describes the purpose of the FAA's hazard communication program. It covers OSHA and FAA requirements for written program, warning labels and how to interpret them, and how to read a material safety data sheet. All are in accordance with OSHA Standard 29 CFR 1910.1200 and FAA Order 3950. This course is 100% correspondence study.

Prerequisites: None
And one of the following: None

18603 ANI Quality Management System

Training Manager: AMA-405 Course Length: 4 hour(s)

This course provides participants with a general understanding of the ANI Quality Management System (QMS). The basic structure and operating relationships of the ANI QMS is explained through the quality manual, standard operating procedures, and work instructions. Attendees are provided specific information on the following: ANI quality manual, document and record controls, management review, internal audits, corrective and preventive actions, control of nonconforming products, enterprise models, web page applications, and the relationship of product realization SOPs and the QMS.

Prerequisites: None
And one of the following: None

18604 ISO Awareness

Training Manager: AMA-405 Course Length: 4 hour(s)

This course will address the rationale, requirements, and implementation guidelines for International Organization for Standardization (ISO) Quality Management Systems as defined by the ISO 9000:2000 series of documents. Course content includes the following: ISO 9000:2000 and supporting documents, ISO 9001:2000 requirements, the eight quality management principles, new focus of 2000 standards, registration requirements, basic procedure requirements, and basic record requirements.

Prerequisites: None
And one of the following: None

40000 VTABS Site Maintenance

Training Manager: AMA-410 Course Length: 64 hour(s)

This course provides training for ARTCC technicians, engineers, SPS's, and FAA Technical Center personnel on the VSCS Training and Backup System (VTABS), Type 10500. The course is 40 hours Academy lecture and 24 hours Academy laboratory. Lecture and laboratory subjects include system introduction and overview, VTABS workstation, cutover switch subsystem, system monitor, control subsystem, system architecture, position equipment module (PEM), voice switch, IDF, LANs, power supplies, System Monitor and Control Subsystem (SMC), and system-level troubleshooting.

Prerequisites: None
And one of the following: 40272, 40273, 48171, 48172

40023 ICSS Type I, Maintenance

Training Manager: AMA-410 Course Length: 56 hour(s)

This course provides training for technicians and engineers on the Model 400 Integrated Communications Switch System (ICSS) Type I. The course is 25 hours Academy lecture and 31 hours Academy laboratory. Lecture subjects include ICSS's system control unit operation, the compuer-based system control, operation and function of the position console equipment, and function of the central rack

equipment. Laboratory subjects include test and alignment procedures, preventive and corrective maintenance, and troubleshooting.

Prerequisites: 47504
And one of the following: None

40024   ICSS Type II, Maintenance

Training Manager: AMA-410   Course Length: 64 hour(s)

This course provides training for technicians on the ICSS Type II. The course is 23 hours Academy lecture and 41 hours Academy laboratory. Lecture subjects include position modules, module controller, TDM concepts, PCM BUS, common controller, DCC BUS, POSCO, RADCO, TRUO, and T/R interface racks. Laboratory subjects include level checks, pow er supply checks, squelch adjustment, mapping and reconfiguration, and troubleshooting practice.

Prerequisites: 47504, 47012
And one of the following: None

40028   Denro Rapid Deployment Voice Switch (RDVS)

Training Manager: AMA-410   Course Length: 48 hour(s)

This course provides training for technicians on the ICSS Denro Model 400 RDVS. The course is 24 hours Academy lecture and 24 hours Academy laboratory. Lecture subjects include RDVS system description, theory of operation of LRU's, system reconfiguration, audio levels/alignments, and troubleshooting. Laboratory subjects include operation of positions, audio level checks, alignment of positions, central rack boards and pow er supplies, system reconfiguration, and troubleshooting.

Prerequisites: 47012, 47504
And one of the following: None

40029   ICSS L/A 3080

Training Manager: AMA-410   Course Length: 48 hour(s)

This course provides training for technicians on the Litton/Amecon II ICSS 3080. The course is 23 hours Academy lecture and 25 hours Academy laboratory. Lecture subjects include PCU, RCU, TCU, position modules, MCU, pow er distribution, common elements, mapping, and reconfiguration. Laboratory subjects include calling procedures, level checks, mapping, and reconfiguration.

Prerequisites: 47012, 47504
And one of the following: None

40035   Dictaphone 5000 Recorders

Training Manager: AMA-410   Course Length: 40 hour(s)

This course provides training for technicians on the Dictaphone 5000 recorders. The course is 24 hours Academy lecture and 16 hours Academy laboratory. Lecture subjects include description of equipment, operational parameters, signal and safe-scan paths, alignment of audio, pow er supply adjustment, and troubleshooting. Laboratory subjects include component and assembly location, audio signal tracing, safe-scan signal path, alignment of audio, electrical adjustments, and troubleshooting.

Prerequisites: 44006
And one of the following: None

40041   ETVS Hardware Maintenance

Training Manager: AMA-410   Course Length: 96 hour(s)

This course provides training for technicians on the Denro Enhanced Tow er Voice Sw itch (ETVS). The course is 48 hours Academy lecture and 48 hours Academy laboratory. Lecture subjects include ETVS System overview, function and operation of position modules, purpose and theory of operation of ETVS LRU's, periodic and corrective maintenance, system reconfiguration, fault isolation and troubleshooting. Laboratory subjects include operation of position equipment, system-level checks and alignments, system reconfiguration, fault isolation, and troubleshooting.

Prerequisites: 47504
And one of the following: None

40042   Litton Rapid Deployment Voice Switch (RDVS) IIA

Training Manager: AMA-410   Course Length: 64 hour(s)

This course provides training for engineers and technicians on the RDVS IIA System. The course is 32 hours Academy lecture and 32 hours Academy laboratory. Subjects include system overview, operating features and capabilities, position equipment, control units, quality control and configuration control terminals, map and source file editing, pow er distribution, passw ord protection, and troubleshooting using the system softw are.

Prerequisites: 47504
And one of the following: None

40043   ACD/VRS - DSP 1000 Maintenance

Training Manager: AMA-410   Course Length: 64 hour(s)

This course provides training for AF personnel responsible for maintenance of the automated call Director/Voice Retrieval System - Digital Sw itching Platform 1000 System. Subjects include a course overview, system technical manuals, terminology, and a lab w alk-through. Lecture/lab requires the student to identify, familiarize, and perform tasks associated w ith equipment configurations, components and their functions, the system database and related screen menu

structures, system operations, and cable tracing. System troubleshooting challenges the student to identify and isolate system problems and determine the appropriate corrective action required to make the system operational.

Prerequisites: None
And one of the following: None

40044 VSCS Tandem Update

Training Manager: AMA-410 Course Length: 128 hour(s)

This course provides training for technicians, engineers, and FAA Technical Center personnel on the Tandem CLX 860 computer. The course is 64 hours Academy lecture and 64 hours Academy laboratory. Lecture subjects include the Tandem CLX processor system, I/O controllers, cold load procedures, guardian operating system, documentation, TACL, utilities, tape operations, peripherals, Tandem maintenance and diagnostic subsystem (TMDS), and system messages. Laboratory subjects include overview, mechanical orientation, cold loading, documentation, TACL, file utility program (FUP), editor, peripheral utility program (PUP), spooler, tape operations, TMDS, and power fail recovery procedures.

Prerequisites: None
And one of the following: 48171, 48172

40045   Digital Voice Recorder, Type II (DVR2)

Training Manager: AMA-410 Course Length: 40 hour(s)

This course provides training for technicians on the DVRS, Type II (DVR2). This course is 20 hours Academy lecture and 20 hours Academy laboratory. Lecture subjects include the theory of operation, evaluations, preventative maintenance procedures, and fault analysis. Laboratory subjects include system operating procedures, system evaluation, routine test procedures, adjustments, and isolation of faults.

Prerequisites: None
And one of the following: 44013, 44020

40046 VCSU Site Software Maintenance Delta

Training Manager: AMA-410 Course Length: 88 hour(s)

This course provides training for technicians on the software for the VSCS control subsystem upgrade (VCSU) of the Voice Switching and Control System (VSCS). The course is 44 hours Academy lecture and 44 hours Academy laboratory. The scope of the subject matter is changes to the VSCS as a result of the VCSU implementation. Lecture subjects include system architecture, workstation operations, software operational analysis, data base management, software configuration, and system administration for Windows 2000. Laboratory subjects include fault mitigation, user interface operations, system startup/shutdown, technical documentation, and file management.

Prerequisites: None
And one of the following: 40273, 48172

40047 VCSU Hardware Maintenance Delta

Training Manager: AMA-410 Course Length: 64 hour(s)

This course provides training for technicians on the hardware for the VSCS Control Subsystem Upgrade (VCSU) of the Voice Switching and Control System (VSCS). The course is 37 hours Academy lecture and 37 hours Academy laboratory. The scope of the subject matter is changes to the VSCS as a result of the VCSU implementation. Lecture subjects include system architecture, workstation operations, corrective and preventive maintenance, software configuration, and system administration for Windows 2000. Laboratory subjects include fault mitigation, user interface operations, SIS maintenance, system startup/shutdown, technical documentation, and file management.

Prerequisites: None
And one of the following: 40272, 48171

40132 Boilers and Chillers

Training Manager: AMA-430 Course Length: 120 hour(s)

This course provides training for technicians on boilers and centrifugal chillers used at ARTCC's. The course is 60 hours Academy lecture and 60 hours Academy laboratory. Lecture subject areas include theory and construction of boilers and centrifugal chillers; troubleshooting water testing and treatment; boiler tube replacement methods; boiler operational safety; centrifugal chillers, motors, and controls; water distribution equipment; air handling; and auxiliary equipment. Laboratory subject areas include centrifugal chiller/boiler safety and operation, troubleshooting, and water treatment.

Prerequisites: None
And one of the following: 40114, 47607, 40156

40133 Environmental Systems and Controls

Training Manager: AMA-430 Course Length: 200 hour(s)

This course provides training for technicians on Johnson and Honeywell pneumatic controls and devices, Liebert computer air conditioning systems, and CSI direct digital controls used at ARTCC's. The course is 100 hours Academy lecture and 100 hours Academy lab. Lecture subjects include properties and the condition of air; system analysis and balancing; pneumatic control of air handling equipment; environmental control systems remote monitoring equipment; use of special test equipment and computers; troubleshooting and calibration methods; and performance evaluation. Lab subjects include pneumatic control system adjustment and system troubleshooting.

Prerequisites: None
And one of the following: 40114, 47607, 40156

40135 Approach Lighting System With Flashers (ALSF)-II (Godfrey)

Training Manager: AMA-430   Course Length: 120 hour(s)

This course provides training for technicians and engineers on the Godfrey ALSF-2 FA-9993. The course is 60 hours Academy lecture and 60 hours Academy laboratory. Subjects include constant current regulators, control and monitor cabinet, and ADB-ALNACO flashers with master timer a control cabinet.

Prerequisites: None
And one of the following: 44111, 47600, 44117

40136 Approach Lighting System With Flashers (ALSF)-II (Airflo)

Training Manager: AMA-430   Course Length: 120 hour(s)

This course provides training for technicians and engineers on the Airflo ALSF-II FA-10048. The course is 60 hours Academy lecture and 60 hours Academy laboratory. Lecture and laboratory subjects include constant current regulator, control and monitor cabinet, Godfrey flashers, and control cabinet.

Prerequisites: None
And one of the following: 44111, 47600, 44117

40143 Medium Intensity Approach Lighting System With RAIL

Training Manager: AMA-430   Course Length: 80 hour(s)

This course provides training for technicians on the MALSR/RMS and REIL/RMS, Types FA-10290 and FA-10264. The course is 40 hours Academy lecture and 40 hours Academy laboratory. Lecture subjects include configuration, control cabinet, ICC, flasher head, and RMS. Laboratory subjects include control cabinet, ICC, RMS, and troubleshooting.

Prerequisites: None
And one of the following: 44111, 47600, 44117

40147 DME MALSR/RMS

Training Manager: AMA-430   Course Length: 48 hour(s)

This course provides training for technicians and engineers on the Medium Intensity approach light system with runway alignment indicator lights (MALSR) and Remote Monitor System (RMS) manufactured by the DME Corporation. The course is 20 hours Academy lecture and 28 hours Academy laboratory. Lecture subjects include system and component description, layout and configuration, circuit description, interconnection diagrams, component operation, and RMS general description and operation. Lab subjects include equipment layout, configuration, component location, maintenance tasks, adjustments, system troubleshooting, and RMS operation and

use.

Prerequisites: None
And one of the following: 44111, 47600, 44117

40148 NBP Dual Mode ALSF-2/SSALR

Training Manager: AMA-430   Course Length: 160 hour(s)

This course provides training for technicians, engineers, SPS, and FAATC personnel on the New Bedford Panoramex Dual Mode ALSF-2/SSALR, Type FA-10700. The course is 80 hours Academy lecture and 80 hours laboratory. Lecture subjects include electrical safety (high voltage), electro-static discharge (ESD), system overview, safety disconnect switch, 480 VAC input cabinet, 50 KVA transformer, distribution panel high voltage output cabinet, lamp holder shorting device, constant current regulator, control and monitor cabinet, remote control cabinet, remote electronic cabinet, and individual flashers and testers. Lab subjects include operation, preventive maintenance, and troubleshooting.

Prerequisites: None
And one of the following: 44111, 47600, 44117

40149 Exide Power Conditioning System (PCS) Maintenance

Training Manager: AMA-430   Course Length: 80 hour(s)

This course provides training for technicians on the Exide UPS 3000 Series, 50 KW, 80 KW, 100 KW (but not Exide Powerware or BP Series UPS). The course is 40 hours Academy lecture and 40 hours Academy laboratory. Lecture subjects include overall operation, rectifier charger, inverters, inverter legs, static switch, batteries, and A13 cards. Laboratory subjects include system operating procedures. Students who have completed Course 47604, ACEPS (or equivalent) should not take this course.

Prerequisites: None
And one of the following: 44111, 47600, 44117

40154 Kohler Engine Generator Power Systems

Training Manager: AMA-430   Course Length: 80 hour(s)

This course provides training for technicians and engineers on Kohler engine generators, control panels, and automatic transfer switches. The course is 40 hours Academy lecture and 40 hours AAcademy laboratory. Lecture subjects include generators, governors, voltage regulators, and theory of Kohler engine generator systems. Laboratory subjects include electrical/electronic maintenance and repair of automatic transfer switches and troubleshooting mechanical and electrical systems. Only for personnel who have had prior engine generator training.

Prerequisites: 40127
And one of the following: 44111, 47600, 44117

40156   Air Conditioning

Training Manager: AMA-430   Course Length: 120 hour(s)

This course provides training for technicians, engineers, FAA Technical Center personnel, and developmental technicians on air conditioners of 10 tons or less and window-type air conditioners. The course is 60 hours Academy lecture and 60 hours Academy laboratory. Lecture subjects include heat, temperature, pressure, air, basic refrigeration, basic air conditioning, compressors, heat pumps, and electrical and refrigeration troubleshooting. Laboratory subjects include basic refrigeration principles, airflow, troubleshooting analysis, soldering and brazing of piping, and basic maintenance procedures.

Prerequisites: None
And one of the following: 44111, 44117

40157   Powerware Plus 80-160 KVA (BP III)/IPM

Training Manager: AMA-430   Course Length: 56 hour(s)

This course provides training for system performance specialists, FAA Technical Center personnel, and developmental technicians on Powerware Plus IPM/BP III Models 30, 40, 50, 65, 80 and 160 Uninterruptible Power Supply (UPS) manufactured by Powerware. The course is 28 hours lecture and 28 hours lab. Lecture subjects include system overview, startup and shutdown procedures, rectifier control board, inverter board, monitor board, power supply modules, software setup and configuration. Lab subjects include startup and shutdown; rectifier, inverter and monitor board setup; module replacements; software configuration and interface with module. Students must bring a laptop computer.

Prerequisites: None
And one of the following: 44111, 44117

40158   Fiber Optic Concepts

Training Manager: AMA-430   Course Length: 40 hour(s)

This course provides training for technicians, engineers, FAA Technical Center personnel, and developmental technicians on the concepts of fiber optics. This course is 12 hours Academy lecture and 28 hours Academy laboratory. Lecture subjects include fiber optic theory, safety, and emergency restoration. Laboratory subjects include cable structure, power meter and light source operation, fiber preparation and splicing, effects of matching GEL, connectorization optical time domain reflectometer use, and fusion splicing. Due to safety requirements of the course, students are required to wear long pants.

Prerequisites: None
And one of the following: None

40159   Racal-Premnet Fiber Optic Multiplexer

Training Manager: AMA-430   Course Length: 40 hour(s)

This course provides training for technicians, engineers, FAA Technical Center personnel, and developmental technicians on the Premnet 5000 fiber optic multiplexer. The course is 12 hours Academy lecture and 28 hours Academy laboratory. Lecture subjects include fiber optic applications in an airport loop, loop configuration overview and design, installation and system configuration, CMS 400 software, and system features and components. Laboratory subjects include Premnet 5000 familiarization, Premnet software, troubleshooting Premnet 5000, CMS 400 software familiarization, and troubleshooting with CMS 400 software.

Prerequisites: 40158
And one of the following: None

40160   ACEPS Standby Power and Distribution System

Training Manager: AMA-430   Course Length: 320 hour(s)

This course provides training for airway facilities technicians, engineers, specialists, and Technical Center personnel on the ACEPS Standby Power and Distribution System. This course is 160 hours Academy lecture and 160 hours Academy laboratory. Lecture subjects include configuration, 48 VDC Power System, GE switchgear, and Woodward and Basier electronic controls. Laboratory subjects include setup, operation, and troubleshooting of equipment.

Prerequisites: 45110
And one of the following: None

40161   ACEPS Critical Distribution System

Training Manager: AMA-430   Course Length: 200 hour(s)

This course provides training for airway facilities technicians, engineers, specialists, and Technical Center personnel on the ACEPS critical distribution system. This course is 100 hours Academy lecture and 100 hours Academy laboratory. Lecture subjects include Exide UPMS (450KW) an Exide BTCS. Laboratory subjects include setup, operation, and troubleshooting of equipment.

Prerequisites: 40160
And one of the following: None

40162   ARTCC Critical and Essential Power System (ACEPS) Update

Training Manager: AMA-430   Course Length: 240 hour(s)

This course provides update training for airway facilities technicians on the ARTCC critical and essential power system (ACEPS). This course is 120 hours Academy lecture and 120 hours Academy laboratory. Lecture subjects include configuration of White engine

generator and control panels, 48 VDC Power System, GE switchgear and breakers, and Woodward and Basler electronic controls. Laboratory subjects include setup, operation, and troubleshooting of the above equipment.

Prerequisites: None
And one of the following: 44111, 44117, 47600

40213   Runway Visual Range (RVR) Equipment, Type FA-7861

Training Manager: AMA-420   Course Length: 80 hour(s)

This course provides training for technicians on the RVR (SSR), Type FA-7861. The course is 44 hours Academy lecture and 36 hours Academy laboratory. Lecture subjects include transmissometer, signal data converter, runway light intensity relay chassis, and indicators. Laboratory subjects include transmissometer adjustment and calibration, signal data converter performance checks and troubleshooting, and runway light intensity relay chassis adjustment.

Prerequisites: None
And one of the following: None

40252   Runway Visual Range (RVR) Equipment, Tasker 500

Training Manager: AMA-420   Course Length: 80 hour(s)

This course provides training for technicians on the RVR (Tasker 500), Type FA-9471. The course is 48 hours Academy lecture and 32 hours Academy laboratory. Lecture subjects include transmissometer, ambient light sensor, runway light setting box, signal data converter, and remote display programmer. Laboratory subjects include transmissometer performance checks and calibration, runway light setting box alignment, signal data converter waveform analysis, remote display programmer adjustment, and troubleshooting.

Prerequisites: None
And one of the following: None

40257   Solid-State Direction Finder (DF), Type FA-9964

Training Manager: AMA-410   Course Length: 80 hour(s)

This course provides training for technicians on solid-state DF equipment. The course is 40 hours Academy lecture and 40 hours Academy laboratory. Lecture subjects include doppler DF theory and the complete solid-state DF system. Laboratory subjects include system alignment, preventive and corrective maintenance, and troubleshooting.

Prerequisites: 47504
And one of the following: None

40258   Distance Measuring Equipment (DME), Models FA-8974/FA-9639

Training Manager: AMA-420   Course Length: 80 hour(s)

This course provides training for technicians on the Second Generation Cardion DME, Type FA-9639. The course is 45 hours Academy lecture and 35 hours Academy laboratory. Lecture subjects include overall design, transponder, test generator, monitor, and remote monitoring systems. Laboratory subjects include preventive maintenance procedures, adjustments and alignments, and troubleshooting.

Prerequisites: 44020
And one of the following: 44215, 40276, 40284

40261   Doppler VHF Omnidirectional Range (DVOR) System

Training Manager: AMA-420   Course Length: 80 hour(s)

This course provides training for technicians on the Second Generation VOR modified to Doppler Cardion DME, Type FA-9996. The course is 24 hours Academy lecture and 56 hours Academy laboratory. Lecture subjects include breakdown of doppler drawer, antennas, and transmitter and monitor screens. Laboratory subjects include screens, alignments, adjustments, preventive maintenance, and fault isolation.

Prerequisites: 47701, 40276
And one of the following: None

40272   VSCS Hardware Maintenance

Training Manager: AMA-410   Course Length: 496 hour(s)

This course provides training for technicians on the hardware for the Voice Switching and Control System (VSCS). The course is 298 hours Academy lecture and 198 hours Academy laboratory. Lecture subjects include system configuration, troubleshooting, software configuration and restoration, and analysis of software diagnostics. Laboratory subjects include fault mitigation, user interface operations, switching system architecture, telephony controller selection, SIS maintenance, VCET maintenance, system startup/shutdown, TACL, technical documentation, file management, and database management.

Prerequisites: 44012, 47012
And one of the following: 44013, 44020

40273   VSCS Site Software Support

Training Manager: AMA-410   Course Length: 584 hour(s)

This course provides training for technicians on the operational software program for the Voice Switching and Control System (VSCS). The course is 292 hours Academy lecture and 292 hours Academy laboratory. Lecture subjects include writing, debugging, and executing programs; updating and modifying adaptation

parameters; and modifying, debugging, and executing maintenance and diagnostic programs. Laboratory subjects include TACL, system management, technical documentation, peripheral operations, file operation, TMF, ESD aw areness, MPES operation, user interface operation, system troubleshooting, system startup/shutdow n, call processing, and database management.

Prerequisites: 44012, 47012
And one of the following: 44013, 44020

40283   Theory of Instrument Landing Systems

Training Manager: AMA-420 Course Length: 144 hour(s)

This course provides training for technicians, engineers, and developmental technicians on instrument landing systems (ILS) theory. The course is 112 hours Academy lecture and 32 hours Academy laboratory. Lecture subjects include general ILS theory, transmission-line theory, glideslope theory, and localizer theory. Laboratory subjects include radiation-pattern analysis, equipment adjustments, and ILS test equipment. Students must possess skills required to w ork algebra and trigonometry problems.

Prerequisites: 44715
And one of the following: None

40284   Navigation Systems Concepts

Training Manager: AMA-420 Course Length: 200 hour(s)

This course provides training for technicians, engineers, FAA Technical Center personnel, and developmental technicians on concepts of navigational systems. The course is 160 hours lecture and 40 hours labatory. Lecture includes transmission line and basic antenna theory, VOR signal generation, VOR radiation patterns, ground check analysis, TACAN introduction, receivers, antenna, and antenna speed control circuits. Laboratory includes introduction to VOR/TACAN, pulse train, azimuth test generator, monitor and control screen introduction, coder/decoder, space modulation, error analysis, VVM introduction, and VOR bridges. Students must be able to w ork algebra and trigonometry problems.

Prerequisites: None
And one of the following: 44013, 44020

40285   Low-Power TACAN Antenna Maintenance

Training Manager: AMA-420 Course Length: 40 hour(s)

This course provides training for technicians on the low pow er TACAN antenna, DC pow ered, Type FA-10369. The course is 18 hours Academy lecture and 22 hours Academy laboratory. Lecture subjects include azimuth review , assemblies and sub-assemblies, pow er distribution, trigger generator, bit and test points, cable routing, PM checks, speed control, and troubleshooting. Laboratory subjects include locating assemblies and controls, system alignment, course rotation, built in tests, LRU and antenna removal and replacement.

Prerequisites: 47701
And one of the following: None

40286   Third Generation VOR/DME Maintenance

Training Manager: AMA-420 Course Length: 120 hour(s)

This course provides training for technicians on the Wilcox Third Generation VOR/DME, Type FA-10391. The course is 60 hours Academy lecture and 60 hours Academy laboratory. Lecture and laboratory subjects include theory of operation, diagnostic procedures, fault analysis, equipment adjustments, alignment and operating procedures, measurements, and analysis of system parameters.

Prerequisites: 44215
And one of the following: 40276, 40284

40289   VSCS System Overview

Training Manager: AMA-410 Course Length: 112 hour(s)

This course provides training for NAS managers on the Voice Sw itching and Control System (VSCS). The course is 67 hours Academy lecture and 45 hours Academy laboratory. Lecture subjects include VSCS theory of operations; block-level physical and functional descriptions of hardw are, softw are, and system interfaces; and perform reconfiguration tasks, diagnostic checks, and maintenance procedures for the VSCS and peripheral devices. Laboratory subjects include Electrostatic Discharge (ESD) System, fault isolation, position reconfiguration, user interface operations, system startup/shutdow n, and system-level troubleshooting.

Prerequisites: 44012, 47012
And one of the following: 44013, 44020

40290   LLWAS NE++

Training Manager: AMA-420 Course Length: 40 hour(s)

This course provides training to AF personnel on the LLWAS NE++, Type FA10387. This course is 16 hours Academy lecture, 24 hours Academy laboratory, and a final examination. Lecture subjects include LLWAS concepts, NE++ theory of operation, and controls and indicators. Laboratory subjects include system familiarization, performance, maintenance, alignment, and troubleshooting.

Prerequisites: 47504
And one of the following: 44013, 44020

40291   LLWAS RS, Type FA-14100

Training Manager: AMA-420 Course Length: 80 hour(s)

This course provides training for AF personnel on the Low Level Windshear Alert System Relocation and Sustainment (LLWAS-RS),

Type FA-14100. This course is 40 hours Academy lecture and 40 hours Academy laboratory. Lecture subjects include system concepts, major and subassembly identification, communication functions, system displays, functional characteristics, signal flow, MDT, and system software applications. Lab subjects include system operation check, verification, performance, analysis, and alignment.

Prerequisites: 47504
And one of the following: 44013, 44020, 88440

40292   Antenna and Transmission Lines

Training Manager: AMA-420   Course Length: 96 hour(s)

This course provides training for technicians, engineers, developmental technicians, and Technical Center personnel on antenna and transmission lines. The course is 86 hours Academy lecture and 10 hours Academy laboratory. Lecture subjects include math review, general transmission line theory, quarterwave transformers, stubbing, baluns, bridges, 3 DB couplers, modulation principles, power in the AM wave, space modulation, basic antenna concepts and definitions, basic antenna pairs with equal/unequal currents, specific and multiple antenna pairs, image antenna, and dipole antennas. Lab subjects include fluted lines, bridge and line length, and space modulation.

Prerequisites: None
And one of the following: None

40296   WAAS WRS/WMS Equipment Lab

Training Manager: AMA-420   Course Length: 72 hour(s)

This course provides hands on equipment labs for technicians and engineers who maintain WAAS WRS/WMS equipment. This course is 72 hours resident laboratory. Subjects include performing corrective maintenance, troubleshooting, and repair of the WAAS WRS and WMS.

Prerequisites: 44226
And one of the following: None

40310   Radar System Analysis for Digitized Radar (Optimization)

Training Manager: AMA-450   Course Length: 120 hour(s)

This course provides training for technicians and engineers who are regularly and actively involved with optimization efforts on radar beacon systems. The course is 60 hours lecture and 60 hours laboratory. Lecture subjects include optimization methodologies, use of software analysis tools for radar/beacon performance evaluation, flight, and commissioning inspections, and optimization procedures for ASR-9 and Mode-S. Laboratory subjects include use of PC's to run software analysis tools to record and analyze live radar and beacon data. Course 44325 serves as the first part of this course and therefore is an absolute, mandatory prerequisite.

Prerequisites: 44320, 44325
And one of the following: 40337, 40398

40313   Terminal Doppler Weather Radar (TDWR) System

Training Manager: AMA-440   Course Length: 136 hour(s)

This course provides training for technicians on the TDWR System equipment and software interfaces to the RMM. The course is 68 hours Academy lecture and 68 hours Academy laboratory. Lecture subjects include functional analysis of the TDWR System and Subsystems. Laboratory subjects include system performance analysis, fault analysis, and alignment.

Prerequisites: None
And one of the following: 40392, 42058, 88360

40328   Solid-State Video Mapper

Training Manager: AMA-450   Course Length: 40 hour(s)

This course provides training for technicians and engineers on the Video Mapper, Type FA-8970. The course is 22 hours Academy lecture and 18 hours Academy laboratory. Lecture subjects include familiarization, trigger, sweep, video-generator circuits, and ACP converter circuit. Laboratory subjects include system alignment, system performance, and fault diagnosis.

Prerequisites: None
And one of the following: 42058, 40392, 88346, 88360

40333   Airport Surveillance Radar (ASR)-8

Training Manager: AMA-450   Course Length: 280 hour(s)

This course provides training for technicians and engineers on the Airport Surveillance Radar (ASR)-8, Type FA-9335. The course is 140 hours Academy lecture and 140 hours Academy laboratory. Lecture subjects include controls, timing, transmitter, normal video, MTI, STC, and RAG. Laboratory subjects include align radar system, fault isolate, and use corrective procedures to restore operation.

Prerequisites: None
And one of the following: 42058, 40392, 88346, 88360

40335   Air Traffic Control Beacon Interrogator (ATCBI)-4

Training Manager: AMA-440   Course Length: 80 hour(s)

This course provides training for technicians on the Air Traffic Control Beacon Interrogator (ATCBI)-4. The course is 40 hours Academy lecture and 40 hours Academy laboratory. Lecture subjects include system concepts, pulse-mode generator, stagger, SLS/ISLS,

transmitter, receiver monitors, control circuits, and beacon test set. Laboratory subjects include system alignment, system performance analysis, fault diagnosis, and use of test equipment.

Prerequisites: None
And one of the following: 40392, 42058, 88360

40337   Airport Surveillance Radar (ASR)-9

Training Manager: AMA-450   Course Length: 360 hour(s)

This course provides training for technicians and engineers on the Airport Surveillance Radar (ASR)-9, Type FA-10064. The course is 160 hours Academy lecture and 200 hours Academy laboratory. Lecture and laboratory subjects include introduction, RMS/system control, synchronizer, transmitter, receiver, post processor, SCIP, and modems/antenna.

Prerequisites: None
And one of the following: 42058, 40392, 88346, 88360

40340   Radio Communication Link (RCL) Terminal Equipment

Training Manager: AMA-440   Course Length: 80 hour(s)

This course provides training for technicians and engineers on the RCL system equipment located at high-density terminal area control facilities (ACF's) only. The course is 44 hours Academy lecture and 36 hours Academy laboratory. Lectures include introduction, Granger DTL 7300 Multiplexing System, Coastcom channel bank, Fairchild M505M microwave MODEM, and RCL Automated Network Management System. Laboratory includes RCL terminal equipment introduction, Granger DTL 7300 multiplexing system, Coastcom channel bank, Fairfield M505M microwave MODEM, ANMS basic commands, software installation, database construction, and skills.

Prerequisites: 40600
And one of the following: None

40345   Airport Movement Area Safety System (AMASS)/TAIU

Training Manager: AMA-440   Course Length: 40 hour(s)

This course provides training for technicians on the Airport Movement Area Safety System (AMASS) hardware and the terminal automation interface unit (TAIU). The course is 14 hours Academy lecture and 26 hours Academy laboratory. Lecture subjects include theory of operation, block and functional diagrams, AMASS computer operation, specialized test equipment operation, algorithm flows, and the interface between ARTS III, SCIP, and ASDE-3. Laboratory subjects include operational and functional checks, preventive maintenance, system monitoring/troubleshooting/fault isolation to the LRU, and returning the AMASS and TAIU to normal operation.

Prerequisites: 40381
And one of the following: None

40373   DBRITE

Training Manager: AMA-460   Course Length: 64 hour(s)

This course provides training for technicians on the Digital Bright Radar Indicator Tower Equipment (DBRITE), Type FA-10220. The course is 32 hours Academy lecture and 32 hours Academy laboratory. Lecture subjects include functional theory of DSC equipment, PS&J RCU, the display, and fault identification and isolation using system diagnostic procedures. Laboratory subjects include DSC equipment, PS&J, RCU, the display, fault identification and isolation, and system alignments.

Prerequisites: 44020
And one of the following: 44300, 40392, 42058

40383   ARSR-1/2 En Route Radar System With SSR/DMTI Mod

Training Manager: AMA-440   Course Length: 120 hour(s)

This course provides training for technicians and system performance specialists on the en route radar ARSR-1/2. The course is 60 hours Academy lecture and 60 hours Academy laboratory. Lecture subjects include system concepts, system timing, transmitter operation, and SSR/DMTI monitor and control. Laboratory subjects include orientation, configuration, alignment, and troubleshooting.

Prerequisites: None
And one of the following: 40392, 42058, 88360

40388   ARSR-3 and RMM

Training Manager: AMA-440   Course Length: 520 hour(s)

This course provides training for technicians and engineers on the Air Route Surveillance Radar, Model 3 (ARSR-3). The course is 50% Academy lecture and 50% Academy laboratory. Lecture subjects include system overview, subsystem theory, test equipment, BITE, and lab preparation. Laboratory subjects include orientation, configuration, alignment, fault isolation including PATS testing, and Prolab practice.

Prerequisites: 42058
And one of the following: 40339, 47706

40391   Airport Surveillance Radar (ASR)-9 SCIP

Training Manager: AMA-450   Course Length: 56 hour(s)

This course provides training for technicians and engineers on the indicator-site equipment of the ASR-9 System, consisting of the remote surveillance communications interface processor (SCIP),

modems, and Remote Monitoring Subsystem (RMS) terminal. The course is 26 hours Academy lecture and 30 hours Academy laboratory. Lecture subjects include operational procedures for the radar system and its computer control and evaluation system, the RMS laboratory subjects include fault isolation, testing, and alignment procedures. This course is for locations where maintenance is required only for the indicator site equipment.

Prerequisites: None
And one of the following: 42058, 40392, 88346, 88360

40395 Airport Surveillance Radar (ASR)-7E

Training Manager: AMA-450 Course Length: 200 hour(s)

This course provides training for technicians and engineers on radar, Type FA-8200E. The course is 126 hours Academy lecture and 74 hours Academy laboratory. Lecture subjects include controls, timing, transmitter, normal video, MTI, STC, and RAG. Laboratory subjects include performance evaluation, fault diagnosis, test procedures, and routine checks and adjustments.

Prerequisites: None
And one of the following: 42058, 40392, 88346, 88360

40398 Mode-S Sensor Maintenance

Training Manager: AMA-450 Course Length: 200 hour(s)

This course provides training for technicians and engineers on the Mode-S System, Type FA-10201. The course consists of 80 hours Academy lecture with CBI simulations and 120 hours of Academy lab. Lecture subjects include monopulse detection theory, equipment operation and block diagram, radar and communication interfaces, and application of the buillt-in test facilities. CBI subjects include softare applications, data processing and auxiliary equipment theory and operation, and use of automated documentation. A graded practical exam verifies students have obtained minimum operational skills. The practical exam grade is weighted equal to a written exam.

Prerequisites: 44020
And one of the following: 42058, 40392, 88346, 88360

40399 FPS Series Radar

Training Manager: AMA-440 Course Length: 120 hour(s)

This course provides training for technicians and system performance specialists on the en route radar system AN/FPS series radar without SSR/DMTI. The course is 58 hours Academy lecture and 62 hours Academy laboratory. Lecture subjects include power distribution and control, transmitter RF and power amplifiers, and SSR/DMTI receiver. Laboratory subjects include orientation, alignment, and operation.

Prerequisites: None
And one of the following: 40392, 42058, 88360

40407 Air Route Surveillance Radar 4 (ARSR-4) System Overview

Training Manager: AMA-440 Course Length: 48 hour(s)

This course provides system overview training for supervisors and/or F&E, regional, or SMO engineers on ARSR-4 long-range radar systems. This course does not provide IMCS menu training for NAS or NOMS. The course is 24 hours Academy lecture and 24 hours Academy lab. Lecture subjects include system block diagram, system menu usage, system operation, reconfiguration, RMS menus, and BIT/FIT. Laboratory subjects include system orientation, menu usage, RMS, site adjustable parameters, reconfiguration, and fault isolation testing. This course is the same as the first 6 days of course 40408, hardware.

Prerequisites: None
And one of the following: None

40408 Air Route Surveillance Radar 4 (ARSR-4) Hardware

Training Manager: AMA-440 Course Length: 240 hour(s)

This course provides training for technicians, engineers, and FAA Technical Center personnel on the ARSR-4 long-range radar system. The course is 96 hours Academy lecture and 144 hours Academy laboratory. Lecture subjects include system overview, subsystem theory, and lab preparations. Laboratory subjects include orientation, configuration, fault isolation, and alignment procedures.

Prerequisites: None
And one of the following: 40392, 42058, 88360

40409 Advanced MPS Network Management

Training Manager: AMA-480 Course Length: 80 hour(s)

This course provides training for personnel who will be managing the MPS Tandem System. The course is 28 hours Academy lecture and 52 hours Academy laboratory. Subjects include Tandem LAN overview, TIM software overview, outside view, subsystem communications facility (SCF) operation, ethernet protocols and TCP/IP, remote/server calls/Piccolo configuration, expand and x.25 networks, Tandem configuration file analysis, and monitoring and troubleshooting the MPS LAN System. Equivalent Tandem training can substitute for courses 43048 and 43049. Equivalent Tandem training includes 43045, 43046, 43047, 43016,43017, 43018,43525, and 43522.

Prerequisites: 40412, 43048, 43049
And one of the following: None

40410 'C' Language Programming

Training Manager: AMA-480 Course Length: 160 hour(s)

This course provides training for AOS programmers in 'C' language

programs. The course is 80 hours Academy lecture and 80 hours Academy laboratory. Lecture subjects include overview of 'C' language; input/output in 'C'; variables; program structure; sequential, conditional, and interactive statements; and bitwise operators' pointers. Laboratory subjects include writing programs that pertain to each of the above areas. This course is designed for personnel who have previous high-level programming experience and develop or maintain programs written in 'C' language.

Prerequisites: None
And one of the following: 44013, 44020

40412 Fundamentals of MCC/MPS Network Managment

Training Manager: AMA-480 Course Length: 120 hour(s)

This course provides training for personnel who will be maintaining the software and hardware platform used to provide connectivity from the SOC/OCC to the MPS. The course is 42 hours Academy lecture and 78 hours Academy laboratory. Lecture subjects include LAN theory, Windows NT workstation server configuration, component troubleshooting, and configuration of the software tools i.e.; outside view (MMS), MASS, the event manager program, and the callback program from the point of view of networking. Lab subjects include Windows NT workstation and Windows NT server configuration, troubleshooting of each component, hands on outside view (MMS), MASS, the event manager and callback programs.

Prerequisites: 44012
And one of the following: 44013, 44020

40417 Automated Surface Observing System (ASOS) Maintenance

Training Manager: AMA-480 Course Length: 80 hour(s)

This course provides training for technicians on the ASOS equipment. The course is 32 hours Academy lecture and 48 hours Academy laboratory. Lecture subjects include system operations, diagnosis, repair, and restoration to the lowest replaceable unit (LRU). Laboratory subjects include operation, preventive maintenance, remote maintenance monitoring, and troubleshooting.

Prerequisites: 47504
And one of the following: 44013, 44020

40418 Fundamentals of Internetworking

Training Manager: AMA-480 Course Length: 160 hour(s)

This course provides training for techs, engrs, SPS, and ATSS's on networking using PC's in a local area network (LAN). The course is 80 hours lecture and 80 hours lab. Lectures include network terminology; LAN/WAN topology, components and architecture; network protocols and standards; IP address classes and subnets; and Windows NT server, workstation, configuration and management.

Lab includes capture/analyze ethernet management traffic; isolate, decode/analyze, TCP/IP, UDP, RUP, ARP headers; troubleshoot connectivity problems; examine/configure a basic router; troubleshoot network connectivity w/protocol analyzer and the domain reflectometer. Proficiency with Windows is required.

Prerequisites: None
And one of the following: None

40420 HOST Concepts

Training Manager: AMA-470 Course Length: 128 hour(s)

This course provides hardware and software overview training for computer operators, technicians, and NAS/NOM personnel involved with the HOST Oceanic Computer System Replacement (HOCSR) and NAS operational program. The course is 77 hours Academy lecture and 51 hours Academy laboratory. Subjects include introduction to the IBM 9672 RA-4 generation 3 (g3) processor, use and operation of controls and indicators of peripheral devices, system operation (initial program load, startup, startover, switchover and reconfiguration), virtual machine and conversational monitoring system concepts, messages, and operation.

Prerequisites: None
And one of the following: 44013, 44020

40421 MVS/VM/DSR Operations for Computer Operators

Training Manager: AMA-470 Course Length: 80 hour(s)

This course provides training for computer operators on Virtual Machine (VM), Multiple Virtual Storage (MVS) commands and messages, utility programs and interactive system productivity facility/program development (ISPF/PDF) panels. The course is 48 hours Academy lecture and 32 hours Academy laboratory. Subjects include problem determination, isolation of software problems, recognizing program and system errors, reconfiguration of system programs, DSR System overview, tape management, tape drives, printers, terminals, and flight strip printer control unit.

Prerequisites: 40420
And one of the following: None

40422 Tower Data Link Services (TDLS)

Training Manager: AMA-480 Course Length: 64 hour(s)

This course provides training for technicians and engineers on the TDLS equipment. The course is 32 hours Academy lecture and 32 hours Academy laboratory. Lecture subjects include overview, load the operating system, identify various commands and protocols, maintain software/hardware, and troubleshooting, including disaster recovery. Lab subjects include load the system, use common commands, perform SCO administration, use TCP/IP, configure, maintain software/hardware, and troubleshoot including disaster

recovery. This course is intended for students who will maintain the new TDLS system, not the legacy system. This course does not replace 47401.

Prerequisites: 40423
And one of the following: None

40423 UNIX

Training Manager: AMA-480 Course Length: 112 hour(s)

This course provides training for technicians, engineers, SPS's, NAS managers, and computer operators on the UNIX Operating System used on various PC's. The course is 56 hours Academy lecture and 56 hours Academy laboratory. Lecture subjects include UNIX concepts, processing utilities, power user utilities, Shell programming, user admin utilities, and dialects. Laboratory subjects include using basic UNIX commands, using network utilities, exploring advanced command functionality, using complex regular expressions, and identifying important syntax for dialects.

Prerequisites: None
And one of the following: None

40424 HID/NAS/LAN Configuration and Maintenance

Training Manager: AMA-480 Course Length: 80 hour(s)

This course provides training for technicians and engineers on the HID/NAS/LAN equipment. The course is 40 hours academy lecture and 40 hours Academy laboratory. Lecture subjects include components, configuration, flow, operations, and maintenance philosophy. Laboratory subjects include maintenance procedures and troubleshooting procedures.

Prerequisites: 40418, 40423
And one of the following: None

40426 HOST Peripheral Devices and Diagnostics

Training Manager: AMA-470 Course Length: 104 hour(s)

This course provides training for technicians, engineers, NAS managers, SPS's, and FAA Technical Center personnel on the Host and Oceanic Computer Replacement (HOCSR) equipment, Model IBM Host 9672-RA4 G3 processors and all attached peripheral devices. The course is 64 hours Academy lecture and 40 hours Academy laboratory. Subjects include peripheral device operations and diagnostics and processor system diagnostics.

Prerequisites: 40420
And one of the following: None

40428 Stand-Alone Weather Sensors (SAWS) Maintenance

Training Manager: AMA-480 Course Length: 24 hour(s)

This course provides training for technicians on the SAWS equipment. The course is 8 hours Academy lecture and 16 hours Academy laboratory. Lecture subjects include system operations, diagnosis, and connecting the laptop to the system. Laboratory subjects include operation, preventive maintenance, and troubleshooting.

Prerequisites: 47504
And one of the following: 44013, 44020

40429 Automated Weather Sensor System (AWSS) Maintenance

Training Manager: AMA-480 Course Length: 80 hour(s)

This course provides training for tehcnicians on the Automated Weather Sensor System (AWSS) equipment. The course is 32 hours Academy lecture and 48 hours Academy laboratory. Lecture subjects include system operations, diagnosis, and remote maintenance monitor (RMM). Laboratory subjects include operation, preventive maintenance, and troubleshooting.

Prerequisites: 47504
And one of the following: 44013, 44020

40430 NADIN Network Control Center (NCC) Operations and Mtnce

Training Manager: AMA-480 Course Length: 120 hour(s)

This course provides training for air traffic systems specialists (network control center (NCC) engineers, operations specialists, and technicians) located at NADIN NCC's responsible for operation and maintenance of the NADIN Packet Switch Network (PSN) and NCC. The course is 48 hours Academy lecture and 72 hours Academy laboratory. Lecture subjects include Wide Area Network (WAN) operations and controls, parameters, indications, configurations, and troubleshooting procedures. Laboratory subjects include hands-on operations and monitoring of the network, local and remote analyzing, diagnosing and troubleshooting, and preventive and corrective maintenance.

Prerequisites: 43542
And one of the following: None

40431 Automated Weather Observing System (AWOS) Maintenance 133

Training Manager: AMA-480 Course Length: 56 hour(s)

This course provides training for AF technicians on the Automated Weather Observing System (AWOS) equipment. The course is 17 hours Academy lecture and 39 hours Academy laboratory. Lecture subjects include system operations, diagonisis, repair, and remote maintenance monitor (RMM). Laboratory subjects include operation, preventive maintenance, RMM, and troubleshooting. The AWOS Model

300 w as modified (ECP 133) to look like an AWOS 900. Modification Number PEM/EEM 133.

Prerequisites: 47504
And one of the following: 44013, 44020

40432   CTAS for System Administrators

Training Manager: AMA-480   Course Length: 40 hour(s)

This course provides training for airw ay facilities technicians and engineers w ho are system administrators for the Center Tracon Automation System (CTAS). This course is 20 hours Academy lecture and 20 hours Academy laboratory. Lecture subjects include Solaris administration, CTAS TMA softw are administration and maintenance, Jumpstart server, CTAS TMA security. Lab subjects include system administration, maintenance, and security.

Prerequisites: None
And one of the following: 40423, 88433

40434   HOST Disk for AF SPS (Software) & AOS-370

Training Manager: AMA-470   Course Length: 96 hour(s)

This course provides training for AF system specialists and AOS-370 personnel w ho have a w orking know ledge of the current HOST Storage Subsystem. This course is 48 hours Academy lecture and 48 hours Academy laboratory. Lecture subjects include an overview of the 5630 disk monitor and control (M&C), operations of the 5630, operations for M&C, subsystem management, hardw are management, and system administration. Laboratory subjects include exercises involving the 5630 disk, 5630 M&C, subsystem management, hardw are management, and system administration.

Prerequisites: None
And one of the following: 40420, 43035, 43040, 43014

40435   HOST CS and NAS/NOM

Training Manager: AMA-470   Course Length: 72 hour(s)

This course provides training for AF NAS managers/NOMs and computer operators w ho have a w orking know ledge of the current HOST Storage Subsystem. This course is 36 hours Academy lecture and 36 hours Academy Laboratory. Lecture subjects include an overview of the 5630 disk monitor and control (M&C), operations of the 5630, operations for M&C, and subsystem management. laboratory subjects include exercises involving the 5630 disk, 5630 M&C, and subsystem management.

Prerequisites: None
And one of the following: 40420, 43035, 43037, 43040, 43014

40436   HOST Disk for AF Hardware Maintenance

Training Manager: AMA-470   Course Length: 80 hour(s)

This course provides training for AF technicians (hardw are maintenance) w ho have a w orking know ledge of the current HOST Storage Subsystem. This course is 40 hours Academy lecture and 40 hours Academy laboratory. Lecture subjects include an overview of the 5630 disk monitor and control (M&C), operations of the 5630, operations for M&C, subsystem management, and hardw are management. Laboratory subjects include exercises involving the 5630 disk, 5630 M&C, subsystem management, and hardw are management.

Prerequisites: None
And one of the following: 40420, 43014, 43035, 43040

40437   DSR Software Administration and Maintenance

Training Manager: AMA-470   Course Length: 136 hour(s)

This course provides training for AF system performance specialists on DSR softw are administration and maintenance. This course is 68 hours Academy lecture and 68 hours Academy laboratory. Lecture subjects include system overview , air traffic and softw are design, maintenance and control (M&C) console operation, system configuration/reconfiguration, AIX commands and system administration, DSR adaptation, softw are release installation management, problem recovery/resolution, DSR SAR data reduction/analysis, and system hardw are/softw are problem determination. Lab subjects include installation, operation, and configuration of the above subjects.

Prerequisites: 40423
And one of the following: 40440, 43556, 43557

40438   DSR Problem Determination

Training Manager: AMA-470   Course Length: 64 hour(s)

This course provides training for system performance specialists (SPS) on the display system replacement. The course is 24 hours Academy lecture and 40 hours Academy laboratory. Lecture and laboratory include subjects needed by the specialist to perform online and offline problem determination on the DSR System. Online problem determination subjects include status and error monitoring, automated system and manual recovery actions. Offline problem determination subjects include system analysis recordings (SAR), data reduction and analysis (DR&A), and offline tools used to perform DR&A and AIX commands used in the DR&A process.

Prerequisites: 43555
And one of the following: None

40439   ACE-IDS Hardware Maintenance

Training Manager: AMA-480   Course Length: 64 hour(s)

This course provides training for technicians on the ASOS Controller

Equipment Information Display System (ACE-IDS). Topics covered in the lecture and lab include system introduction, data flow and softw are, system operations, troubleshooting, preventive maintenance, and field removal and replacement procedures.

Prerequisites: None
And one of the following: None

40440 DSR Overview

Training Manager: AMA-470 Course Length: 80 hour(s)

This course provides introductory training on the Display System Replacement (DSR). This course is 48 hours Academy lecture and 32 hours Academy laboratory. Lecture and lab subjects include overview of DSR hardw are, softw are, and air traffic operations, operation of the maintenance and control console for system monitoring, and problem recovery and resolution. This course is intended as an introduction to the DSR System and is a prerequisite to course 40441.

Prerequisites: **40418, 40423**
And one of the following: None

40441 DSR Hardware Maintenance

Training Manager: AMA-470 Course Length: 280 hour(s)

This course provides training for Air Route Traffic Control Center (ARTCC) hardw are maintenance personnel w ho w ill perform corrective and periodic maintenance on the DSR System. This course is 130 hours Academy lecture and 150 hours Academy lab. Lecture subjects include main display monitor alignment, and problem isolation and repair of all DSR hardw are to the LRU. Laboratory subjects include console operation, main display monitor alignment, and problem isolation and repair of the hardw are to the LRU.

Prerequisites: **40418, 40423, 40440**
And one of the following: None

40442 ACE-IDS Remote Workstation

Training Manager: AMA-480 Course Length: 24 hour(s)

This course provides training for AF system specialists on the ASOS Controller Equipment Information Display System (ACE-IDS) remote w orkstations. This course is 10 hours Academy lecture and 14 hours Academy laboratory. Subjects covered in the lecture and lab include system introduction, data flow and softw are, system operations, troubleshooting, preventive maintenance, and field removal and replacement procedures.

Prerequisites: None
And one of the following: None

40443 Standardized AFCC Operations

Training Manager: AMA-480 Course Length: 24 hour(s)

This course provides training for airw ay transportation system specialists on the Enhanced Maintenance Control Center (MCC) Platform. The course is 8 hours Academy lecture and 16 hours Academy laboratory. Lecture subjects include overview of the enhanced MCC platform environment, using the event manager, using SOP's w ith the enhanced MCC platform, and applications using the enhanced MCC platform. Laboratory subjects include components of the enhanced MCC platform, using the event manager, call-back and site information, SOP's, w eb-based applications, remote maintenance monitor system applications, and other applications.

Prerequisites: None
And one of the following: None

40600 Common Equipment for Radio Communications Link (CE-RCL) Sys

Training Manager: AMA-440 Course Length: 120 hour(s)

This course provides training for technicians and engineers on the radio communication link (RCL) equipment common to the terminal and repeater equipment. The course is 59 hours Academy lecture and 61 hours Academy lab. Lecture subjects include system overview , RCL pow er plant, DTL-7300 Multiplexing System, FR8 Radio System, orderw ire/ANS service channel equipment and ANMS satellite unit. Laboratory subjects include troubleshooting and maintenance of RCL terminal and repeater common equipment, AT&T RCL pow er plant, Granger DTL-7300 multiplexing systems, AT&T FR8 radio system, and AT&T ANMS satellite telemetry unit.

Prerequisites: **44321**
And one of the following: None

40601 Low-Density RCL (LDRCL) UHF Analog System

Training Manager: AMA-440 Course Length: 40 hour(s)

This course provides training for technicians and engineers on the microw ave communications link equipment LDRCL UHF analog system. The course is 26 hours Academy lecture and 14 hours Academy laboratory. Lecture and laboratory subjects include introduction, Microtel analog system multiplexing equipment, microw ave data systems (MDS) 960a series 900 Mhz analog point-to-point radios, pow er conversion products DC pow er system, and Westronics WS2000 general telemetry processor. Laboratory subjects include location, annual maintenance, alignment, and operation.

Prerequisites: **44321**
And one of the following: None

40603 Low-Density RCL (LDRCL) 1.8 GHz Digital System

Training Manager: AMA-440 Course Length: 40 hour(s)

This course provides training for technicians and engineers on the microwave communications link equipment LDRCL 1.8 GHz and 8 GHz digital system. The course is 65% Academy lecture and 35% Academy laboratory. Lecture subjects include introduction, Wescom 360-22 D4 digital carrier terminal, Alcatel MDR-5000 series microwave digital radio, power conversion products DC power system, and Westronics WS2000 general telemetry processor. Laboratory subjects include location, annual maintenance, alignment, and operation.

Prerequisites: 44321
And one of the following: None

40605   DBRITE Display (Remote Tower Equipment)

Training Manager: AMA-460 Course Length: 32 hour(s)

This course provides training for technicians, engineers, and FAA Technical Center personnel on the DBRITE tower equipment, Type FA-10225. The course is 50% lecture and 50% laboratory. Lecture subjects include overall system, PS&J, RCU, display video and sync, deflection and focus, and power supplier and bit card. Laboratory subjects include equipment introduction, module replacement, PS&J and aural alarm, vertical and horizontal deflection, video sync, power supplies, and bit and troubleshooting. This course does not contain DSC material (personnel requiring DSC training should take course 40373).

Prerequisites: None
And one of the following: None

40606   Radiation Hazard Measurement Procedures

Training Manager: AMA-450 Course Length: 24 hour(s)

This course provides training for technicians and engineers on radiation hazard measurement procedures for air traffic control radar and communications equipment. The course is 24 hours Academy laboratory. Subjects include performing ionizing and nonionizing measurements on pulsed systems, calculation of power density levels from the results of measurements, and writing a report documenting the measurement results for the Office of Spectrum Policy and Management (ASR-1). Attendees will be selected by ASR-1.

Prerequisites: 44516
And one of the following: None

40608   ARTS Color Display (ACD) Subsystem

Training Manager: AMA-460 Course Length: 40 hour(s)

This course provides training for technicians, engineers, NAS managers, SPS's, FAA Tech Center personnel, and developmental technicians on the ACD. The course is 16 hours Academy lecture and 24 hours Academy laboratory. Lecture subjects include functional sections, electronics drawer assembly/function, circuit card

assemblies interfaces, indicators/switches, display initialization, VME/PCI BUSS theory, PowerPC, graphics controller, serial interfaces, keyboard, trackball, radar scan converter, DEC talk, and transition module characteristics. Laboratory subjects include ACD operation, diagnostics, and line replaceable unit removal/replacement procedures, and alignment.

Prerequisites: 42052
And one of the following: None

40609   ASDE 3A Hardware/AMASS/TAIU

Training Manager: AMA-440 Course Length: 128 hour(s)

This course provides training for technicians, engineers, FAATC personnel, and developmental technicians on the Airports Surface Detection Equipment (ASDE)-3 Radar System with Airport Movement Area Safety System (AMASS) and Terminal ARTS Interface Unit (taiu). The course is 54 hours Academy lecture and 74 hours Academy laboratory. Lecture subjects include system operation, transmitter, receiver, antenna, display equipment, and system troubleshooting and analysis. Laboratory subjects include location, operation, maintenance, and troubleshooting, including analysis of visual indicators and use of the remote monitoring subsystem and external personal computer.

Prerequisites: None
And one of the following: 40392, 42058, 88360

40611   Weather System Processor (WSP)

Training Manager: AMA-450 Course Length: 80 hour(s)

This course provides training for technicians and engineers who are responsible for the Weather System Processor (WSP) at selected ASR-9 sites. This course is 40 hours Academy lecture and 40 hours Academy lab. Lecture and lab subjects include operation, preventive maintenance, corrective maintenance, hardware alignment, system alignment, and calibration.

Prerequisites: 40337, 40423
And one of the following: None

40612   Terminal Automation Interface Unit (TAIU) Stand Alone

Training Manager: AMA-440 Course Length: 16 hour(s)

This course provides training for technicians on the TAIU. The course is 4 hours Academy lecture and 12 hours Academy laboratory (approximately 2 hours per student). Lecture subjects include theory of operation and interface between ARTS III, SCIP, and the ASDE-3. Laboratory subjects include operational and functional checks, periodic preventive maintenance, monitoring, troubleshooting, fault isolation to the LRU, and returning the TAIU to normal operations.

Prerequisites: None
And one of the following: None

Prerequisites: 42052
And one of the following: None

40615   Sony/UNIX Introduction

Training Manager: AMA-490   Course Length: 40 hour(s)

This course provides training for DOD personnel on the Sony Digital Display Monitor, DDM2800. The course is 12 hours Academy lecture, 12 hours Academy laboratory, and 16 hours computer-based exercises (CBE). Lecture subjects include introduction, system operation, UNIX, and display alignment. Laboratory subjects include alignment, using the digital remote controller; diagnostics, and repair. CBE subjects include training on Sun Solaris.

Prerequisites: None
And one of the following: None

40616   STARS Systems Specialists

Training Manager: AMA-490   Course Length: 200 hour(s)

This course provides the STARS System specialist with a thorough understanding of the concepts necessary to perform STARS System and security administration. This includes: Solaris VI Editor and networking for SS; file systems; disk structure/partitions; startup and shutdown n; backup and restore procedures; crash management; account management; security administration and policy; Solaris security, BSM and auditing; NIS+, Secureshell; STARS-specific security; and STARS System software installation. The SOS security administrator will be able to perform all of the STARS security processes and procedures necessary for continued operation of the STARS operational site within the NAS.

Prerequisites: 42071
And one of the following: None

40617   ARTS Color Display Complete (ACD, RGW, and Sony DDM)

Training Manager: AMA-460   Course Length: 80 hour(s)

This course provides training for technicians on the ARTS color display monitor (ACD, RGW, and Sony DDM). The course is 40 hours Academy lecture/40 hours Academy lab. Lecture subjects include VME, PCI, and SCSI buses; Motorola 2700 single board computer; interface modules, converters, and adapters; controllers; digital I/O card; peripheral devices; Sony DDM components; and system troubleshooting. Lab subjects include installation/operation of application software; setup of configuration and environment values; installation of firmware; Sony DDM alignment; RGW monitor graphical user interface operation; RM-10 Sony remote controller operation, CA-100 color analyzer, convergence gauge and AS-10 software package; and system

40618   PowerPC Delta

Training Manager: AMA-460   Course Length: 40 hour(s)

This course provides delta training for AF personnel on the PowerPC CP for ARTS IIIE. The course is 16 hours Academy lecture and 24 hours Academy lab. Lecture includes theory and operation of the PowerPC CP, TP, and SMC subsystems, the VME chassis, Motorola MVME2700 single board computer, digital input/output card, serial interface card, four port ethernet card, SCSI devices, transition modules, network switches, system software, and system graphical user interfaces on SMC PC. Lab subjects include software downloads to the CP, TP, and SMC, extended diagnostics on all chassis, initializing the MVME2700 single-board computer, preventative maintenance, system performance montioring, and troubleshooting.

Prerequisites: 42052
And one of the following: None

40621   Integrated Terminal Weather System (ITWS) Production Model

Training Manager: AMA-440   Course Length: 64 hour(s)

This course provides training for technicians and engineers on the Integrated Terminal Weather System (ITWS) Hardware System and its interfaces. This course is 32 hours Academy lecture and 32 hours Academy laboratory.   Subjects include equipment theory, site-level maintenance procedures, automated test tools, system-level control and monitoring, board-level fault isolation and replacement, and troubleshooting input/output devices.

Prerequisites: None
And one of the following: 12762, 40423

40625   STARS Remote Tower Maintenance

Training Manager: AMA-490   Course Length: 80 hour(s)

This course provides training for qualified airways transportation systems specialists on the STARS automation system used in remote towers. This course is tentatively scheduled for 36 hours Academy lecture and 44 hours Academy lab. Lecture subjects include system introduction, theory, and operations. Lab excercises include hands-on learning with the focus on the maintenance and repair of the STARS remote tower equipment.

Prerequisites: 88440, 88441
And one of the following: 12751, 40423

40626   Micro-EARTS Hardware Maintenance

Training Manager: AMA-460 Course Length: 120 hour(s)

This course provides training for technicians, engineers, SPS's, FAATC personnel, and AOS on terminal/en route automation equipment. The course is 66 hours Academy lecture and 94 hours Academy laboratory. Lecture includes system theory; functional analysis of radar data acquisition, remote display driver, communications data acquisition, data entry and display, and central processing; keyboard entries; LRU remove/replace; analysis of various printouts; and hardware diagnostics. Lab includes initialization and shutdown, running diagnostics, remove/replace LRUs, system troubleshooting analysis, CDR maintenance and extraction, alignment of data display monitors, and recent hardware changes including Sun platforms, CAT5 LAN, CGWs, and TCW/CGWs.

Prerequisites: **44320, 44403**
And one of the following: None

41705 (CBI/MM) ODAPS for NAS/NOMS and Technicians

Training Manager: AMA-470 Course Length: 44 hour(s)

This course provides training for technicians and NAS managers on the Oceanic Display and Planning System (ODAPS) equipment. The course is 48% correspondence study, 48% advanced training aids (ATA's), and 4% computer-based instruction (CBI). Correspondence subjects include system overview, power-on/off procedures, software initialization, shutdown procedures, commands and responses, changing operational mode, monitoring system operations and diagnostic tools. ATA subjects include overview and interfaces, power-on/off, startup/shutdown, changing operational mode, commands and messages, and diagnostics. The end-of-course exam is on CBI.

Prerequisites: None
And one of the following: None

41706 (CBI/MM) ODAPS for Computer Operators

Training Manager: AMA-470 Course Length: 33 hour(s)

This course provides training for computer operators on Oceanic Display and Planning System (ODAPS) equipment. The course is 48% correspondence study, 48% advanced training aids, and 4% computer-based instruction (CBI). Correspondence subjects include system overview, power-on/off procedures, software initialization, shutdown procedures, commands and responses, VM/MVS commands and utilities, changing operational mode, and monitoring system operations. ATA subjects include overview and interfaces, power-on/off, startup/shutdown, changing mode, and commands and messages. The end-of-course exam is on CBI.

Prerequisites: None
And one of the following: None

42010 Sensor, Receiver, and Processor (SRAP)

Training Manager: AMA-460 Course Length: 160 hour(s)

This course provides training for technicians on the SRAP. The course is 80 hours Academy lecture and 80 hours Academy laboratory. Lecture subjects include RMC, REX (RDAS), and BDAS. Laboratory subjects include lecture support and a graded performance exam. Course not required at ASR-9 sites.

Prerequisites: 42027
And one of the following: None

42027 Data Processing Subsystem (DPS)

Training Manager: AMA-460 Course Length: 480 hour(s)

Training for techs, engrs, SPS, & FAATC personnel on DPS, IOPB, RDFU, & SSM for ARTS IIIA, EARTS. The course is 302 hrs lecture/178 hrs lab. Lectures include syst preview; IOP repertoire, hdwr mech & control, diagnostics; SSM theory and OPS, diagnostics; RDFU hardware & software, diagnostics; I/O repertoire, hdwr mech, diagnostics; IOPB interrupts; interrupt software/hdwr; system status analysis, T/S, and OPS. Lab includes equipment intros; power distribution; program loading & writing; IOP modes, sequences, timing, mech & T/S; RDFU mech, prog, and T/S analysis; I/O mech, T/S, and interrupts; system fault analysis, recovery printout interpretation, T/S, and diagnostics.

Prerequisites: None
And one of the following: 40392, 42058, 88360

42035 ARTS IIIA Data Entry and Display Subsystem (DEDS)

Training Manager: AMA-460 Course Length: 120 hour(s)

This course provides training for technicians on the ARTS IIIA DEDS, Type I and Type II consoles. The course is 72 hours Academy lecture and 48 hours Academy laboratory. Lecture subjects include DEDS theory of operation, alignment, and corrective maintenance; MDBM theory of operation, configuration and corrective maintenance; and DEDS/MDBM diagnostic operation and analysis. Laboratory subjects include DEDS alignment and troubleshooting, MDBM operation through problem operation and troubleshooting using the MDBM diagnostic, and verification of DEDS operation using the DEDS diagnostic.

Prerequisites: 42027
And one of the following: None

42037 ARTS IIIA Software for SPS Personnel

Training Manager: AMA-460 Course Length: 240 hour(s)

This course provides training for system performance specialists on the data processing system, ARTS IIIA. The course is 90 hours Academy lecture and 150 hours Academy laboratory. Lecture subjects include assembler directives, site adaptation, and software troubleshooting. Laboratory subjects include F-unit assembler, programming, and patching operational program.

Prerequisites: 42035, 42027
And one of the following: 42025, 44324

42039   ARTS IIE for Technicians

Training Manager: AMA-460   Course Length: 280 hour(s)

This course provides training on the Automated Radar Terminal System (ARTS) IIE, Type FA-9020 for technicians and engineers not previously certified on the ARTS IIA equipment. The course is 140 hours Academy lecture and 140 hours Academy laboratory. Lecture and laboratory subjects include introduction, initialization, system maintenance console (SMC), system administration, system processor, diagnostics, decoding data acquisition subsystem (DDAS), radar alphanumeric display subsystems (RADS), and keyboard (KBD).

Prerequisites: None
And one of the following: 40392, 42058, 88360

42050   ARTS Radar Gateway (RGW) Maintenance

Training Manager: AMA-460   Course Length: 24 hour(s)

This course provides training for technicians, engineers, system performance specialists, and FAATC personnel on ARTS RGW maintenance. The course is 12 hours Academy lecture and 12 hours Academy laboratory. Lecture subjects include system theory and operation, VME chassis, Motorola MVME2700 single-board computer, digital input-output/interface/ethernet cards, SCSI devices, transition modules, network and Cisco switches, and system software. Lab subjects include downloading procedures, switch configuration, computer initialization, preventive maintenance, and system troubleshooting.

Prerequisites: 42052
And one of the following: None

42051   Full Digital ARTS Display (FDAD) Hardware Maintenance

Training Manager: AMA-460   Course Length: 64 hour(s)

This course provides training for technicians on ARTS IIIA/ARTS IIIE FDAD, type FA-10173. The course is 35 hours Academy lecture and 29 hours Academy laboratory. Lecture subjects include FDAD theory of operation and corrective, periodic maintenance, with EMS precautions. Laboratory subjects include FDAD alignment, operation verification, and troubleshooting analysis.

Prerequisites: 42052
And one of the following: None

42052   ARTS IIIE Hardware Maintenance (LRU)

Training Manager: AMA-460   Course Length: 160 hour(s)

This course provides hardware maintenance and limited software maintenance training for technicians on ARTS IIIE System, A6.05 version. The course is 80 hours Academy lecture and 80 hours Academy laboratory. Lecture subjects include system introduction, TP theory of operation, CP theory of operation, SMC theory of operation, chassis mechanical description, computer softare configuration item descriptions, local area network (LAN), and VME BUS. Laboratory subjects include system initialization and operation; TP, CP, DP, and SMC subsystem maintenance, and chassis repair; CDR editor, software downloader, troubleshooting, and performance using actual equipment.

Prerequisites: None
And one of the following: 40392, 42058, 88360

42054   ARTS IIIE (A6.05) NAS/NOM

Training Manager: AMA-460   Course Length: 80 hour(s)

This course provides training for NAS area specialists and operations managers on the ARTS IIIE system. The course is 40 hours Academy lecture and 40 hours Academy laboratory. Lecture subjects include system hardware overview, system initialization, system operations, performance monitoring, and diagnostic outputs. Laboratory subjects include performing analysis of various monitoring activities, operational printouts, and diagnostic outputs for system status and capabilities.
.

Prerequisites: None
And one of the following: None

42055   ARTS-IIIE Software Maintenance for SPS's

Training Manager: AMA-460   Course Length: 160 hour(s)

This course provides training for system performance specialists and AUS on ARTS IIIE, A6.05 version. The course is 80 hours Academy lecture and 80 hours Academy laboratory. Lecture subjects include system operation, network concepts, CSCI, operating software, SSIS, and SMCS. Laboratory subjects include troubleshooting software items and network message analysis.

Prerequisites: None
And one of the following: None

42056   STARS Operational Support Facility Specialist

Training Manager: AMA-490   Course Length: 280 hour(s)

The STARS OSF specialist courses teach OSF adaptation specialists how to create, maintain, update, and test site adaptation for the Standard Terminal Automation Replacement System (STARS). It gives the specialist the background information and theory necessary to investigate system problems, and evaluate and resolve national AOS requests (NAR) for STARS. It also teaches STARS adaptation/software testing procedures and methodology, and the

STARS OSF security procedures.

Prerequisites: None
And one of the following: None

42057   Sony Display Maintenance

Training Manager: AMA-460   Course Length: 32 hour(s)

This course provides training for technicians on the Sony digital display monitor DDM2800 as it is used in the Standard Terminal Automation System (STARS), MicroEARTS, ARTS color display (ACD), and similar automation systems. The course is 10 hours Academy lecture and 22 hours Academy laboratory. Subjects include introduction, system operation, display alignment using the digital remote controller, diagnostics, and repair.

Prerequisites: None
And one of the following: None

42058   Modern Radar Concepts

Training Manager: AMA-450   Course Length: 200 hour(s)

This course provides basic radar concepts training for technicians placed in a radar discipline. The course is 70 hours Academy lecture and 130 hours Academy lab. Subjects include basic radar system, transmission lines, waveguide components, antenna systems, radar performance, synchronization and testing methods, high-voltage transmitters, solid-state transmitter (CHIRP), radar receivers, MTI, MTD (pulse compression), interfacing types and methods, display systems, and basic beacon systems. Note: students should bring a scientific calculator (TI-35x or equivalent). An understanding of basic algebra skills and trigonometry is assumed. Students should review these skills as needed.

Prerequisites: None
And one of the following: None

42059   MDR-6000 8 GHz Series Microwave Digital Radio LDRCL System

Training Manager: AMA-440   Course Length: 40 hour(s)

This course provides training for technicians, engineers, and SPS's on the MDR-6000 8 GHz series microwave digital radio, LDRCL System and associated equipment. The course is 26 hours Academy lecture and 14 hours Academy laboratory. Subjects include system overview, Wescom channel bank, microwave digital radio and user system interface (USI) program, Ferro and swicthmode power supplies, and TSM-2500 RMMS System.

Prerequisites: 44321
And one of the following: None

42060   TSM-2500 Monitoring and Control LDRCL RMMS System

Training Manager: AMA-440   Course Length: 40 hour(s)

This course provides training for technicians who will be responsible for maintaining the TSM-2500 (transmission system monitor) program and creating new database (i.e., adding additional sites, creating new configuration, and setting up user passwords). The course is 24 hours of Academy lecture and 16 hours of laboratory. Subjects include TSM-2500 System overview and set up, system program operation, MCS-11 database configuration management, polling engine operation and setup, TTY remote user interface, system troubleshooting, and back-up procedures.

Prerequisites: None
And one of the following: None

42062   Common ARTS Software for OSF Personnel

Training Manager: AMA-460   Course Length: 160 hour(s)

This course provides training for operational support facility (OSF) personnel on common ARTS (A6.05) system software. The course is 80 hours lecture and 80 hours laboratory. Lecture subjects include an overview of the ARTS-IIE/IIIE hardware initialization and operation, modification and distribution of the ARTS-IIE/IIIE software, details of computer software configuration items (CSCI's), and site adaptation concepts. Laboratory exercises use actual system equipment and include system operation, network concepts, CSCI operating software and building a site adaptation file. Laboratory exercises also include troubleshooting software items.

Prerequisites: None
And one of the following: None

42063   ATCBI-6 Hardware Maintenance

Training Manager: AMA-450   Course Length: 40 hour(s)

This course provides hardware maintenance training for technicians and engineers on the ATCBI-6. This course is 8 hours lecture and 32 hours Academy laboratory. Lecture subjects include system operation, alignment, configuration, preventive maintenance, troubleshooting, and corrective maintenance. Laboratory subjects include application of system operation, alignment, configuration, preventive maintenance, troubleshooting, and corrective maintenance. Course 44330 serves as the first part of this course and therefore is an absolute, mandatory prerequisite.

Prerequisites: 42058, 44330
And one of the following: None

42064   TDX 2000 Digitizer

Training Manager: AMA-440   Course Length: 48 hour(s)

This course provides training for airway facilities technicians,

engineers, specialists, and Technical Center personnel on the TDX 2000 Digitizer. This course is 22 hours Academy lecture and 26 hours Academy laboratory. Lecture subjects include equipment theory, operations, configurations, preventive maintenance, and other hardware information. Laboratory subjects include operations, preventive maintenance, corrective maintenance, and troubleshooting.

Prerequisites: 40333, 40395
And one of the following: None

42065 RACD Maintenance

Training Manager: AMA-460 Course Length: 80 hour(s)

This course provides training for airway facilities technicians, engineers, specialists, and computer operators on the remote ARTS color display (racd) maintenance. The course is 40 hours Academy lecture and 40 hours laboratory. Lecture subjects include a basic introduction to RACD, system theory and operation, system components, and system software. Lab subjects include software downloading to an RACD, alignment and repair of a general digital flat screen monitor, initializing the MVME 2700 single-board computer, preventive maintenance, and the system troubleshooting.

Prerequisites: 44320
And one of the following: None

42066 Automation Interface Unit-II (AIU-II)

Training Manager: AMA-460 Course Length: 16 hour(s)

This course provides training for airway facilities technicians, engineers, and Technical Center personnel on the Automation Interface Unit-II (AIU-II). This coures is 4 hours Academy lecture and 12 hours Academy laboratory. Lecture covers AIU-II theory of operation. Laboratory subjects include system operation, preventive maintenance, corrective maintenance, removal and replacement, and system certification.

Prerequisites: None
And one of the following: None

42069 Airport Surveillance Radar-11 (ASR-11)

Training Manager: AMA-450 Course Length: 120 hour(s)

This course provides training for Airway Facilities technicians, engineers, and specialists on the Airport Surveillance Radar-11 (ASR-11). This course is 16 hours Academy lecture and 104 hours Academy laboratory. Lecture subjects include system review and pre- and post-lab briefings. Laboratory subjects include periodic maintenance, system configuration, fault diagnosis, and repair. Course 44329 serves as the first part of this course and therefore is an absolute, mandatory prerequisite.

Prerequisites: 12758, 40423, 44329, 88440, 88441
And one of the following: None

42070 Micro-EARTS Software Maintenance

Training Manager: AMA-460 Course Length: 120 hour(s)

This course provides training for system performance specialists, FAA Technical Center Personnel, and AOS field specialists on Micro-EARTS software maintenance. This course is 56 hours Academy lecture and 64 hours Academy laboratory. Lecture subjects include system theory of operation, system software installation and configuration, site adaptation functions, system analysis, and troubleshooting. Laboratory subjects include system operation, software installation and setup, software functionality, and system analysis.

Prerequisites: 40607
And one of the following: None

42071 Full STARS Maintenance

Training Manager: AMA-490 Course Length: 240 hour(s)

This course provides training for qualified system specialists on the STARS Automation System used in Terminal Radar Approach Control facilities. This course is 92 hours Academy lecture and 148 hours Academy lab. Lecture subjects include an introduction to the system, system operation, Sony monitor, and system components. Lab exercises include hands-on learning and detailed component/system troubleshooting.

Prerequisites: 88440, 88441
And one of the following: 12751, 40423

42072 ATCBI-6 Technical On-Site Representative (TOR)

Training Manager: AMA-450 Course Length: 40 hour(s)

This course provides training for technicians and engineers who will accept the ATCBI-6 System for their site. This course is 40 hours Academy lecture. Lecture subjects include integration and acceptance activities which include knowledge and skills necessary to monitor and report status and discrepancies.

Prerequisites: None
And one of the following: None

42073 Full Service STARS ATSS Delta Maintenance

Training Manager: AMA-490 Course Length: 80 hour(s)

This course provides delta training for systems specialists previously trained on the operation and maintenance of the STARS Early Display (EDC) to operate and maintain the full service STARS. This course is

32 hours Academy lecture and 48 hours Academy laboratory. The lecture portion of this course covers the identification of system components. Lab subjects include hands-on learning exercises and detailed component and system troubleshooting.

Prerequisites: 42038, 88440, 88441
And one of the following: 12751, 40423

42074   Operational Support Facility (OSF) Delta Training

Training Manager: AMA-490   Course Length: 80 hour(s)

This course is for operational support facility (OSF) personnel that have completed the Raytheon-taught STARS adaptation training and require the overview and security portion of course 42056. This course is 39 hours Academy lecture and 41 hours Academy laboratory. Lecture subjects include an intro to STARS, radar data interface and display, flight data interface and display, continuous data recording, system timing, system administration and security, and software maintenance. Lab subjects include hands-on application of lecture subjects.

Prerequisites: None
And one of the following: None

43002   FSAS System Analysis Course

Training Manager: AMA-480   Course Length: 320 hour(s)

This course provides training for technicians, engineers, and FAA Technical Center personnel on the Flight Service Automation System (FSAS). The course is 160 hours Academy lecture and 160 hours AAcademy laboratory. Lecture and laboratory subjects include Tandem B40 software/utility components, Tandem TXP hardware components, Tandem peripherals, diagnostics, system messages, error messages, FSAS application software modules, FSAS protocols, system tape loading procedures, system start-up and loading procedures, and system analysis hardware and software tools.

Prerequisites: None
And one of the following: None

43003   AWOS Data Acquisition System (ADAS) Hardware Maintenance

Training Manager: AMA-480   Course Length: 48 hour(s)

This course provides training for technicians on Automated Weather Observation System (AWOS) ADAS hardware. The course is 24 hours Academy lecture and 24 hours Academy laboratory. Lecture subjects include the system theory of operation, fault diagnosis and isolation, and performance analysis. Laboratory subjects include fault diagnosis, performance analysis, test procedures, use of test equipment, and routine checks and adjustments.

Prerequisites: 44012
And one of the following: 44013, 44020

43005   AFSS Model 1 Full Capacity (M1FC) Hardware

Training Manager: AMA-480   Course Length: 120 hour(s)

This course provides training for technicians and engineers on the M1FC automated flight service station (AFSS) DEC LSI 11/23. The course is 60 hours Academy lecture and 60 hours Academy laboratory. Lecture subjects include the functional analysis of the overall system interface/data flow, an operational analysis of each individual device and module, and detailed explanation of required maintenance procedures. Laboratory subjects include operating the equipment and performing preventive and corrective maintenance procedures.

Prerequisites: None
And one of the following: None

43006   Direct Access Radar Channel (DARC) Operations

Training Manager: AMA-470   Course Length: 48 hour(s)

This course provides training for NAS managers who have had no previous DARC training. The course is 28 hours Academy lecture and 20 hours Academy laboratory. Lecture subjects include prime DARC interfaces, unit identifications and functions, data and control paths, system start-ups, IOT commands, requests and analyses of RTQC reports, and overview of adaptations and M and D. Laboratory subjects include system familiarization and startup, HCS startup of DARC, unit reconfigurations, R-controls procedures, and error and status message analysis.

Prerequisites: None
And one of the following: None

43010   High Capacity Voice Recorder (HCVR) Maintenance (60 Channel)

Training Manager: AMA-410   Course Length: 40 hour(s)

This course provides training for technicians on the Magnasync HCVR. The course is 16 hours Academy lecture and 24 hours Academy laboratory. Lecture subjects include theory of operation, system operation and evaluation, preventive maintenance procedures, and fault analysis. Laboratory subjects include system operating procedures, system evaluation, routine test procedures, adjustments, and isolation of faults.

Prerequisites: 44006
And one of the following: None

43012 PAMRI System Maintenance Support

Training Manager: AMA-470 Course Length: 80 hour(s)

This course provides training for system performance specialists on the Peripheral Adapter Module Replacement Item (PAMRI), including the hardware and software. The course is 48 hours Academy lecture and 32 hours Academy laboratory. Lecture subjects include data flow, formats and messages, data and power distribution, and problem determination/isolation. Laboratory subjects include modem splitter, AU, RDDU, remote RAPPI, MDM, I/O check report, RAPPI PAMRI NAS messages, batch files, and performance exam on AU, RDDU, and remote RAPPI.

Prerequisites: None
And one of the following: 44415, **44020**

43021 HOCSR NAS Monitor and FDP for Systems Specialists.

Training Manager: AMA-470 Course Length: 440 hour(s)

This course provides training for systems specialists on the HOST and Oceanic Computer System Replacement (HOCSR) NAS Monitor and FDP. The course is 320 hours Academy lecture and 120 hours Academy laboratory. Lecture subjects include National Airspace System (NAS) Monitor, NAS System build procedures, Adaptation-Controlled Environment System (ACES), maintenance diagnostic monitor (MDM) build and execution, on-line certification (OLC) and SIM, and flight data processing (FDP). Laboratory sessions include NAS startup/startover, monitor input messages and output responses, FDP, NAS System builds, MDM, and OLC.

Prerequisites: None
And one of the following: 43020, **40420**

43022 HOCSR Abort Analysis for Systems Specialists.

Training Manager: AMA-470 Course Length: 80 hour(s)

This course provides training for systems specialists on the HOST and Oceanic Computer System Replacement (HOCSR) National Airspace System (NAS) software diagnostics and recovery. The course is 65% Academy lecture and 35% Academy laboratory. Lecture subjects include problem resolution by analysis of NAS software aborts and dumps and monitor off-line programs. Laboratory subjects include NASCOR, DART, NTAP paneles, and analyzing program aborts from NASCOR generated dumps.

Prerequisites: **43021**
And one of the following: None

43023 HOCSR Radar Data Processing for Systems Specialists.

Training Manager: AMA-470 Course Length: 168 hour(s)

This course provides training for system specialists on the HOST and Oceanic Computer System Replacement (HOCSR) radar data processing (RDP) software. The course is 76% Acadmey lecture, 24% Academy laboratory. Lecture subjects include radar processing and tracking (RPAT), real time quality control (RTQC), display channel outputs (DCO), and off-line radar analysis programs. Laboratory subjects include RPAT, RTQC, and off-line radar analysis programs BFTA, BCST, COMDIG, RARRE, ORRE, QARS, TAARS, and RSCANS.

Prerequisites: **43021**
And one of the following: **47207**, 43054, 43009

43031 En Route Adaptation

Training Manager: AMA-470 Course Length: 276 hour(s)

This course provides training for air traffic control specialists on maintaining, updating, and testing the NAS adaptation database. The course is 60% Academy lecture and 40% Academy laboratory. Lecture subjects include support software products, airspace and air traffic control operations adaptation records, NAS documentation simulation, adaptation controlled environment system, and data analysis and reduction tools. laboratory subjects include adapting approach control airspace, and building an operational NAS system and testing it.

Prerequisites: None
And one of the following: None

43033 DAS/RSD Operation and Maintenance

Training Manager: AMA-480 Course Length: 40 hour(s)

This course provides training for technicians and engineers on the ARTCC maintenance control center (AMCC) DAS/RSD equipment. The course is 24 hours Academy lecture and 16 hours Academy laboratory. Lecture subjects include NAS/DAS overview, DAS/MDT operations, real-time status display (RSD), and corrective maintenance. Laboratory subjects include location, operations, field replaceable units, and troubleshooting.

Prerequisites: None
And one of the following: 47404, **44012**

43036 NAS Management for MCC Specialists

Training Manager: AMA-480 Course Length: 56 hour(s)

This course provides training for technicians, engineers, & NAS managers on NAS equipment monitored by the MCC. Course is 28 hrs lecture/28 hrs lab w/NAS/NOM simulator for realistic failure scenarios. Service restoration/coordination, RMM via the MPS, outage reporting, service-level certification, & prioritization of failures are all emphasized. Lecture includes managing scheduled interruptions, coordinating w/external organizations, prioritizing outages, reporting, interpersonal skills for coordination, & conflict resolution. Videos are used for some interpersonal skills material. Lab includes

coordinating/managing scheduled and unscheduled interruptions & accident/incident procedures.

Prerequisites: None
And one of the following: None

43048   MPS Tandem Himalayas K2008 Hardware and Utilities

Training Manager: AMA-480   Course Length: 240 hour(s)

This course provides training for technicians and engineers at ARTCC's on maintaining the Tandem Himalayas K2008 MPS. The course consists of 125 hours Academy lecture and 115 hours Academy laboratory. Subjects include introduction to the MPS, system hardware, SCP operations, TS530 terminal, KC17 System terminal, TACL as a command interpreter, non-stop Kernel concepts, edit program, peruse, Syshealth, View point, TMDS (TMDS, EMS LOG, CPU and IPB, MDS, COMMFC, tape, CSS, and disk), RCP, system troubleshooting, disk files/fup, 5126/5170 tape drives and controllers, Tapecom; backup and restore, 5518 and 5515 printers, 36XX CSS equipment and utilities (CMI/CMP/CSM/CAP's), and MT224 modems.

Prerequisites: 44012
And one of the following: 44013, 44020

43049   MPS Tandem Himalaya K2008 Software and Administration

Training Manager: AMA-480   Course Length: 216 hour(s)

This course provides training for technicians and engineers at ARTCC's on maintaining the Tandem Himalaya K2008 Maintenance Processor Subsystem (MPS). The course consists of 113 hours Academy lecture and 103 hours Academy laboratory. Subjects include TACL as a language, introduction to databases, DDL; enform, sql; pathway, enable, MMS/IMCS process and file distribution, TMF, Spoolcom (spooler configuration), DSAP/DCOM, safeguard; introduction to system configuration, context files, install, and system troubleshooting.

Prerequisites: 43048
And one of the following: None

43485   NADIN Concentrator/Modem Subsystem Hardware, ARTCC

Training Manager: AMA-480   Course Length: 80 hour(s)

This course provides training for technicians on National Airspace Data Interchange Network (NADIN IA) Concentrator/Modem Subsystem. The course consists of 40 hours Academy lecture and 40 hours Academy laboratory. Lecture and laboratory subjects include diagnose concentrator, Modem, NADIN Interface Adapter (NIA), and the remote user monitor system faults.

Prerequisites: 44012
And one of the following: 44013, 44020

43519   Direct Access Radar Channel (DARC) for Technicians

Training Manager: AMA-470   Course Length: 312 hour(s)

This course provides training for technicians, engineers, and system performance specialists on DARC. The course is 162 hours Academy lecture and 150 hours Academy laboratory. Lecture subjects include EDARC and National Airspace System/prime channel comparability, system operation, and maintenance procedures on all EDARC equipment. Laboratory subjects include troubleshooting, executing diagnostics, preventive maintenance, system input and output messages, and system certification. Student should be proficient in binary, octal, hexadecimal arithmetic, and digital logic.

Prerequisites: 40418, 44012, 44020, 44511, 47001
And one of the following: None

43520   Enhanced Direct Access Radar Channel (EDARC) Software

Training Manager: AMA-470   Course Length: 280 hour(s)

This course provides training for technicians on EDARC software. The course consists of 140 hours Academy lecture and 140 hours Academy laboratory. Lecture and laboratory subjects include utilities, procedures for program and file maintenance, system operations, system data management, program operations, adaptation procedures, and error analysis.

Prerequisites: None
And one of the following: None

43535   Hocsr NAS Operational Software for NAS/NOMS

Training Manager: AMA-470   Course Length: 248 hour(s)

This course provides training for NAS managers on the HOST and Oceanic Computer System Replacement (HOCSR) NAS software. The course is 70% Academy lecture, 30% Academy laboratory. Lecture subjects include NAS monitor, radar data processing (RDP), flight data processing (FDP), input and output messages, adaptation, on-line certification (OLC), aborts, monitor and radar off-line tools, system problems, and system interface. Laboratory subjects include NAS startup/startover, monitor input messages and output responses, RDP, FDP, OLC, and test NAS.

Prerequisites: 40420, 47207
And one of the following: None

43542   NADIN PSN Hardware Maintenance Course

Training Manager: AMA-480   Course Length: 72 hour(s)

This course provides training for technicians and engineers on the Packet Switching Network (PSN) hardware. The course consists of 36 hours Academy lecture and 36 hours Academy laboratory. Lecture subjects include purpose, operational parameters and indications, and configuration and troubleshooting procedures. Laboratory subjects include location, configuring, analyzing and troubleshooting, and preventive and corrective maintenance.

Prerequisites: 44012, 44418
And one of the following: 44415, 44020

43549   Common Digitizer (CD), Model 2A/B/C/D

Training Manager: AMA-440   Course Length: 160 hour(s)

This course provides training for technicians on the CD Model 2A/B/C/D. The course is 80 hours Academy lecture and 80 hours Academy laboratory. Lecture subjects include a block-diagram analysis, IEEE-488 BUS structure, operating procedures, remote control interface unit as it pertains to the initial remote maintenance monitor equipment, CD-2C equipment used at Air Force/FAA joint-use sites for data tie, and GPA-12a. Laboratory subjects include use of the keyboard, display, trackball, and printer to isolate faults and change operating parameters.

Prerequisites: 42058
And one of the following: 44415, 44020

43557   Display System Replacement for NAS Managers

Training Manager: AMA-470   Course Length: 168 hour(s)

This course provides training for NAS managers on the display system replacement. The course is 46% Academy lecture and 54% Academy laboratory. Lecture subjects include DSR overview, console operation, software design overview, system monitoring, system reconfiguration, problem recovery and resolution, processing new software releases, system verification and control room equipment replacement. Laboratory subjects include console operation, system monitoring, system reconfiguration, problem recovery and resolution, processing new software releases, system verification and control room equipment replacement.

Prerequisites: None
And one of the following: None

44001   Single Sideband Communications

Training Manager: AMA-410   Course Length: 25 hour(s)

This course provides training for technicians on single sideband communications. The course is 100% correspondence study with eight lessons. Subjects include modulated waves and their

components, balanced modulators, sideband filters, methods of SSB generation, heterodyning, linear amplifiers, generation considerations, and application of SSB transmission and reception.

Prerequisites: 44000
And one of the following: None

44006   Basic Multichannel Recorder Theory

Training Manager: AMA-410   Course Length: 40 hour(s)

This course provides training for technicians on the basic multichannel recorder. The course is 100% correspondence study with four lessons. Subjects include general concepts associated with analog and digital magnetic recording, recording heads, tape drive, and transport systems.

Prerequisites: None
And one of the following: None

44007   Telrad Administrative Telephone Systems (ATS)

Training Manager: AMA-410   Course Length: 40 hour(s)

This course provides training for technicians on the Telrad Administrative Telephone System (ATS). The course is 100% correspondence study. Subjects include theory of operation instruction, laboratory equipment performance checks and troubleshooting procedures.

Prerequisites: 47504
And one of the following: 44415, 44020

44009   DAS/RSD Operations

Training Manager: AMA-480   Course Length: 16 hour(s)

This course provides training for NAS managers on Data Acquisition Subsystem (DAS)/Real-time Status Display (RSD) operations. The course is 2 hours correspondence study and 14 hours automated training aids. Subjects include complete functional overview, data flow, alarm acknowledge procedures, and the loading and reloading of operational software.

Prerequisites: None
And one of the following: 44013, 44020

44012   Fundamentals of Data Communication

Training Manager: AMA-410   Course Length: 40 hour(s)

This course provides training for technicians and engineers on data communications. The course is 100% correspondence study. Subjects include communications concepts, hardware equipment, and maintenance.

Prerequisites: None
And one of the following: None

Prerequisites: 47504
And one of the following: None

44013   Introduction to Computers

Training Manager: AMA-470 Course Length: 80 hour(s)

This course provides training for technicians and engineers on basic computer operations. The course is 100% correspondence study. Subjects include data processing, computer components and devices, interactive processing, input and output techniques, interfacing systems, processor unit functions, auxiliary storage, data manipulation, various communication protocols and techniques, software applications, programming languages and their uses, operating systems and their software, designed analysis of computer systems, computer systems projects, their coding and implementation, and programming techniques.

Prerequisites: None
And one of the following: None

44014   Snow Depth Monitor (SDM) System.

Training Manager: AMA-420 Course Length: 35 hour(s)

This course provides training for technicians on the DME Corporation SDM System, Type FA-10330. The course is 100% correspondence study with field-conducted lab. Subjects include system overview, operation, and maintenance at the line replaceable unit level. Credit for the course requires successful completion of field-conducted lab and end-of-course exam.

Prerequisites: None
And one of the following: 40233, 40283

44015   Digital Altimeter Setting Indicator (DASI)

Training Manager: AMA-410 Course Length: 24 hour(s)

This course provides training for technicians on the DASI System. The course is 100% correspondence study. Subjects include functional and operational analysis of the overall operation of computer controlled circuits.

Prerequisites: None
And one of the following: None

44017   Motorola Linear Power Amplifier

Training Manager: AMA-410 Course Length: 16 hour(s)

This course provides training for technicians on the Motorola 50 watt linear power amplifier. The course is 100% correspondence study. Subjects include overview, installation and integration, operation, theory of operation, periodic maintenance, and warranty repair.

44019   Motorola CM-200 Overview

Training Manager: AMA-410 Course Length: 2 hour(s)

This course provides training for technicians and NAS managers on VHF and UHF transmitters and receivers, Model CM-200. The course is 100% video tape with student guide. Subjects include overview, installation, operation, maintenance, and warranty repair.

Prerequisites: 47504
And one of the following: None

44020   Introduction to Computers

Training Manager: AMA-470 Course Length: 80 hour(s)

This course provides training for technicians and engineers on basic computer operations. The course is 100% correspondence study. Subjects include data processing, computer components and devices, interactive processing, input and output techniques, interfacing systems, processor unit functions, auxiliary storage, data manipulation, various communication protocols and techniques, software applications, programming languages and their uses, operating systems and their software, designed analysis of computer systems, computer systems projects, their coding and implementation, programming techniques, using the Internet and basic network operations.

Prerequisites: None
And one of the following: None

44021   VTABS Power Subsystem

Training Manager: AMA-410 Course Length: 24 hour(s)

This course provides training for technicians on the power subsystem for the VSCS Training and Backup System (VTABS) manufactured by Peco II, Incorporated. The course is 100% correspondence study. Subjects include introduction, physical and technical description, controls and indicators, power up and power down procedures, maintenance procedures, removal and replacement LRU's, and preventive maintenance for batteries used in the system.

Prerequisites: None
And one of the following: None

44022   Automatic Fault LOG Processor (AFLP)

Training Manager: AMA-460 Course Length: 80 hour(s)

This course provides training for technicians, engineers, and system performance specialists on the automatic fault LOG processor equipment. The course is 100% correspondence study. Subject

areas include theory of operation and fault evaluation of this Built-In Test Equipment, w hich is used in the ARTS IIIA.

Prerequisites: 42027
And one of the following: None

44023   VSCS Emergency Access Radio System (VEARS)

Training Manager: AMA-410   Course Length: 40 hour(s)

This course provides training for technicians and NAS managers involved in the operation or maintenance of VSCS and VEARS. The course is 100% correspondence study. Subjects include purpose, overview , configuration and features; technical description, operation, controls and indicators; maintenance procedures and performance checks; installation, integration, and checkout procedures.

Prerequisites: None
And one of the following: None

44024   PET-2000 Radio Transceiver

Training Manager: AMA-410   Course Length: 40 hour(s)

This course provides training for AF and at personnel on the operation and maintenance of the Portable Emergency Transceiver-2000 (PET-2000). The course is 100% correspondence study. Subjects include overview of the frequencies, range, pow er, and modes of operation; installation procedures; detailed adjustment procedures; and performance check procedures, fault isolation, and removal of faulty line replaceable units (LRU).

Prerequisites: None
And one of the following: None

44025   Recovery Communications (RCOM) Operator

Training Manager: AMA-410   Course Length: 20 hour(s)

This course provides training for personnel w ho w ill operate the Recovery Communications (RCOM) System. The course is 16 hours self-study text and 4 hours computer-based exercises (CBE). Self-study subjects include RCOM purpose and function, equipment and component identification and purpose, system softw are identification and operation, and system startup/shutdow n procedures. CBE subjects include system operation procedures, startup/shutdow n, and alarm and alert notifications.

Prerequisites: None
And one of the following: None

44026   Recovery Communications (RCOM) Maintenance

Training Manager: AMA-410   Course Length: 40 hour(s)

This course provides training for field maintenance technicians, technical support specialists, and system specialists w ho are responsible for maintaining the Recovery Communications (RCOM) System. The course is 36 hours self-study text and 4 hours computer-based exercises (CBE) w ith a paper-based exam. Self-study subjects include RCOM purpose and function, equipment and component identification and purpose, system softw are identification and operation, startup/shutdow n procedures, and troubleshooting. CBE subjects include system operation procedures, fault isolation, and bit testing.

Prerequisites: None
And one of the following: None

44100   Engines

Training Manager: AMA-430   Course Length: 80 hour(s)

This course provides training for technicians on engine generator sets. The course is 100% correspondence study. Subjects include theory of internal combustion engines, valve systems, carburetion, ignition, cooling, lubrication, fuels, combustion, engine auxiliaries, and control panels.

Prerequisites: None
And one of the following: None

44102   Diesel Engine Generators

Training Manager: AMA-430   Course Length: 45 hour(s)

This course provides training for technicians on engine generator sets. The course is 100% correspondence study. Subjects include theory of diesel engines, basic principles, concepts, terminology, and definitions of diesel engine generators and associated control panels, including basic diesel engine operation, fuel systems, governors, and control panels.

Prerequisites: None
And one of the following: None

44112   Flasher System FA-9989

Training Manager: AMA-430   Course Length: 64 hour(s)

This course provides training for technicians and engineers on the MALSR/REIL Master Timer, Type B, I, II, and III flashers. The course is 100% correspondence study w ith seven lessons. Subjects include system and circuit analysis, evaluation, repair, and preventive maintenance.

Prerequisites: None
And one of the following: 44111, 47600, 44117

44113   MALS/RAIL/REIL

Training Manager: AMA-430   Course Length: 120 hour(s)

This course provides training for technicians and engineers on the runway end identifier lighting (REIL) systems and medium-intensity approach lighting systems (MALS) with runway alignment indicator lights (RAIL) visual landing aid systems. The course is 100% correspondence study with 11 lessons. Subjects include theory, preventive, and corrective maintenance on the following systems: MALSR's and REIL's, Model/Type REIS, Sylvania REIL-2, Sylvania REIL FA-9437, Godfrey REIL FA-9628, MALS/RAIL Multi-Electric MALSR FA-8767, Sylvania MALSR FA-8982, and SEPCO MALSR FA-9629.

Prerequisites: None
And one of the following: 44111, 47600, 44117

44114   High Intensity Approach Lighting Systems (ALS)

Training Manager: AMA-430   Course Length: 128 hour(s)

This course provides training for technicians and engineers on ALS substations and sequenced flashers. The course is 100% correspondence study with five lessons. Subjects include theory, preventive, and corrective maintenance on the Westinghouse FA-1772, General Electric GEI-89310, single phase heavy-duty 3CRSBA, and Sylvania sequenced flasher systems.

Prerequisites: None
And one of the following: 44111, 47600, 44117

44115   Precision Approach Path Indicator (PAPI) Maintenance

Training Manager: AMA-430   Course Length: 64 hour(s)

This course provides training for technicians and engineers on the sonicraft PAPI, Type FA-10147. The course is 100% correspondence study with 12 lessons. Subjects include system configuration, adjustments for initial installation, circuit analysis, evaluation, preventive maintenance, performing alignments, and routine performance checks.

Prerequisites: None
And one of the following: 44111, 47600, 44117

44116   CCMS Maintenance

Training Manager: AMA-430   Course Length: 100 hour(s)

Course provides training for technicians and engineers on the Central Control and Monitoring System (CCMS). The course is 70% correspondence study and 30% field-conducted lab. Correspondence study subjects include: system architecture and operations; DGP/BCC communications; DGP operations; and workstation operation and maintenance. Field conducted laboratory subjects include: system components; workstation operation; system

operations; utilities and diagnostics; and PCL programming. Satisfactory completion requires two exams and a certificate from the system tutorial.

Prerequisites: None
And one of the following: None

44117   Environmental Electrical Concepts

Training Manager: AMA-430   Course Length: 120 hour(s)

This course provides training for technicians on environmental electrical concepts. The course is 100% correspondence study. Subjects include safety, concepts of electricity/magnetism, batteries, electrical conductors, alternating current and vector analysis, basic electrical indicating instruments, transformers, generators, motors, control devices and circuit diagrams, and magnetic amplifiers.

Prerequisites: None
And one of the following: None

44118   Visual Approach Slope Indicator (VASI)

Training Manager: AMA-430   Course Length: 64 hour(s)

This course provides training for technicians and engineers on VASI West Tech FA-9330, DISAN FA-9873, SEPCO FA-9458, SEPCO FA-9458B, and West Tech FA-9458A. The course is 56 hours correspondence study and 8 hours field-conducted lab with a supervised final exam. Correspondence study subjects include operational characteristics, assemblies, subassemblies, performance checks, maintenance, alignment, adjustments, and troubleshooting. Field-conducted lab is conducted on the equipment at the field facility. This course includes a supervised final examination.

Prerequisites: None
And one of the following: 44111, 44117, 47600

44202   Vacuum Tube Circuits

Training Manager: AMA-410   Course Length: 30 hour(s)

This course provides training for technicians on vacuum tubes and their circuit application. The course is 100% correspondence study with three lessons. Subjects include vacuum tube circuit analysis, graphical analysis of vacuum tube circuits, equivalent circuits, basic amplifier types, and circuit operation.

Prerequisites: None
And one of the following: None

44208   Runway Visual Range (RVR) Equipment, FA-7861

Training Manager: AMA-420   Course Length: 40 hour(s)

This course provides training for technicians on the RVR (SSR), Type FA-7861. The course is 100% correspondence study. Subjects include transmissometer system, introduction to RVR computer, and printed circuit modules.

Prerequisites: 47504
And one of the following: None

44212 Remoting Equipment for VHF/UHF Direction Finder (DF)

Training Manager: AMA-410 Course Length: 23 hour(s)

This course provides training for technicians on basic remoting system. The course is 100% correspondence study with two lessons. Subjects include overall block diagram approach, requirements for control lines and hybrid units necessary to transmit the digital information over phone lines from the control station to the Remote site, frequency shift operation concepts, logic principles and circuitry applicable to the remoting equipment.

Prerequisites: 47504
And one of the following: None

44215 Distance Measuring Equipment (DME) Principles

Training Manager: AMA-420 Course Length: 24 hour(s)

This course provides training on distance measuring equipment in general. The course is 100% correspondence study. Subjects include DME concepts, terminology, theory of operation, familiarization of the various units of the DME system consisting of the transponder, monitor, test unit, and the control unit, and an analysis of the system functional block diagram. This course has two lessons and a supervised final. The course is a prerequisite for all stand-alone DME equipment courses.

Prerequisites: None
And one of the following: None

44216 LORAN-C Monitor (FA-10232)

Training Manager: AMA-420 Course Length: 40 hour(s)

This course provides training for technicians on the LORAN-C monitor/receiver, FA-10232. The course is 100% correspondence study with four modules. Subjects include operation, software/hardware overview, troubleshooting, and periodic maintenance. OJT practical exercises, exam, and the four modules are required for successful completion.

Prerequisites: 47701
And one of the following: None

44217 Direction Finder 5530 and Remoting Equipment 5571/5572

Training Manager: AMA-410 Course Length: 40 hour(s)

This course provides training for technicians on the 5530 direction finder (DF) and the 5571/5572 direction finder remoting equipment (RDF). The course is 100% correspondence study with seven lessons. Subjects for DF equipment include doppler theory, Antenna System, receiver, data extractor, local and remote indicators, time domain filter, bearing evaluator monitor, and air ground adapter. Subjects for the remoting equipment include FSK theory, control, and data systems. A basic understanding of vacuum tubes and transistor operations is helpful.

Prerequisites: None
And one of the following: None

44218 Non-Directional Beacon (NDB) System

Training Manager: AMA-420 Course Length: 80 hour(s)

This course provides training for technicians on the Scientific Radio System NDB, FA-9589. The course is 100% correspondence study with 13 lessons. Subjects include the remote monitor receiver, station transmitter, use of the facility input/output terminals (IOT), the antenna tuning unit, and antenna. Graded practical sessions are used to develop skills in performing alignment, fault diagnosis, and routine checks on the NDB System.

Prerequisites: 47504
And one of the following: None

44219 VORTAC Enhancements, FA-9996

Training Manager: AMA-420 Course Length: 20 hour(s)

This course provides training for technicians on the VHF Omnirange Tactical Air Navigation (VORTAC) enhancement kit for the Type FA-9996 VORTAC system. The course is 100% correspondence study. Subjects include technical description and purpose of enhancements, enhancement operations and data screen changes, and periodic and corrective maintenance.

Prerequisites: 44701, 44216
And one of the following: None

44220 RMVC/2nd Gen VORTAC Overview for MCC Specialists

Training Manager: AMA-420 Course Length: 40 hour(s)

This course provides training for system performance specialists and computer operators on monitoring the 2nd Gen VORTAC using the Interim Monitor Control System (IMCS) through the Remote Maintenance VORTAC concentrator (RMVC). The course is 50% correspondence study and 50% field-conducted lab training. Correspondence study subjects include the IMCS application to

remotely monitor and control 2nd Generation VORTAC facilities, as part of the Remote Maintenance Monitoring System. Field-conducted lab subjects include exercises at the MCC terminals.

Prerequisites: None
And one of the following: None

44221   GPS Concepts

Training Manager: AMA-420   Course Length: 40 hour(s)

This course provides training for personnel on Global Positioning System (GPS) concepts. The course is 100% correspondence study and includes a supervised open-book final exam. Subjects include GPS overview, ranging, navigation data message, satellite signal structure and receiver processing, GPS errors, and differential GPS.

Prerequisites: None
And one of the following: None

44222   Teledyne RVR, Type 10268/1-6

Training Manager: AMA-420   Course Length: 12 hour(s)

This course provides theory training for airway facilities personnel on the Runway Visual Range, Type 10268/1-6. This course is 12 hours correspondence study. Subjects include a system overview, visibility sensor (VS), ambient light sensor (ALS), current sensors (CS), sensor interface electronics (SIE), data processing unit (DPU), controller display (CD) operations, standards, and tolerances, and periodic maintenance procedures. Course requires TI 6560.17, 6560.31, and 6990.2 for reference.

Prerequisites: 47001
And one of the following: None

44223   WAAS O&M Equipment (Theory)

Training Manager: AMA-420   Course Length: 60 hour(s)

This course provides theory training for airway facilities technicians and engineers on the WAAS operations and maintenance (O&M) equipment. This course is 60 hours correspondence study. Subjects include an introduction to WAAS, use of the interactive electronic technical manual (IETM), a description of WAAS components at all sites including interfaces and purpose of all line replaceable units (lru's), and an emphasis on corrective maintenance procedures for the O&M subsystem.

Prerequisites: 44221
And one of the following: None

44224   WAAS Operator (Theory)

Training Manager: AMA-420   Course Length: 120 hour(s)

This course provides theory training for airway facilities technicians and engineers that are WAAS operators. This course is 120 hours correspondence study. Subjects include an introduction to WAAS, use of the interactive electronic technical manual (IETM), a description of WAAS components at all sites including interfaces and purpose of all line replaceable units (LRU's), corrective maintenance procedures for the WRS, WMS, and O&M Subsystem, GEO Uplink Subsystem, and all WAAS system operations. This course requires a final supervised exam for completion.

Prerequisites: 44221
And one of the following: None

44225   WAAS WRS Equipment (Theory)

Training Manager: AMA-420   Course Length: 60 hour(s)

This course provides theory training for airway facilities technicians and engineers that maintain the WAAS Wide Area Reference Station (WRS) equipment. This course is 60 hours correspondence study. Subjects include an introduction to WAAS, use of the interactive electronic technical manual (IETM), a description of WAAS components at all sites including interfaces and purpose of all line replaceable units (LRU's), and an emphasis on corrective maintenance procedures for the WRS. This course requires a final supervised exam for completion.

Prerequisites: 44221
And one of the following: None

44226   WAAS WRS/WMS Equipment (Theory)

Training Manager: AMA-420   Course Length: 80 hour(s)

This course provides theory training for airway facilities technicians and engineers that maintain the WAAS Wide Area Reference Station/Wide Area Master Station (WRS/WMS) equipment. This course is 80 hours correspondence study. Subjects include an introduction to WAAS, use of the interactive electronic technical manual (IETM), a description of WAAS components at all sites including interfaces and purpose of all line replaceable units (LRU"s), and an emphasis on corrective maintenance procedures for the WRS and WMS. This course requires a final supervised exam for completion.

Prerequisites: 44221
And one of the following: None

44300   Introduction to Radar Techniques

Training Manager: AMA-450   Course Length: 100 hour(s)

The course provides review, preparation, or supplemental training for technicians and engineers on radar. The course is 100% correspondence study with a supervised final exam. Subjects include introduction to NAS, brief history of radar, block diagram of a typical radar, pulse termonology, the ideal pulse, limitations to transmitting the

ideal pulse, the radar range equation, factors that limit minimum or maximum range waveguides, auxiliary waveguide components, crystal mixers, secondary radar systems. This course is not equivalent to courses 40392 or 42058.

Prerequisites: None
And one of the following: None

44317   Digital Defruiter

Training Manager: AMA-450 Course Length: 32 hour(s)

This course provides training for technicians on the Digital Defruiter, Type MX 8757. The course is 100% correspondence study with a final exam. Subjects include functional analysis, including overall system operation, detailed analysis of data flow, schematics, logic diagrams, system alignment, maintenance techniques, and troubleshooting.

Prerequisites: None
And one of the following: 40335, 45309, 45310

44320   Secondary Radar Principles

Training Manager: AMA-450 Course Length: 40 hour(s)

This course provides training for technicians (who plan to attend ATCBI or Mode S training) on beacon systems. The course is 100% correspondence study with six chapters and a supervised final exam. Subjects include radar beacon systems, transmitters and receivers, antennas, transponders, ATCBI problems, and Mode S Beacon System.

Prerequisites: None
And one of the following: None

44321   Microwave Communications Link Principles

Training Manager: AMA-440 Course Length: 120 hour(s)

This course provides training for technicians and engineers on microwave communications link equipment. The course is 100% correspondence study with a final exam. Subjects include an overview of FAA microwave communications link systems; general system concepts and basic block-diagram analysis; principles of microwave communications link operation common to both terminal and repeater facilities, such as amplitude and frequency modulation, single-sideband communications, multiplexing techniques and modulation plans, frequency translation techniques, system performance analysis, and mathematics for microwave communications.

Prerequisites: 44012
And one of the following: None

44323   Radar Beacon Performance Integral System Monitor

Training Manager: AMA-440 Course Length: 64 hour(s)

This course provides training for technicians on the Radar Beacon Performance Integral System Monitor. The course is 100% correspondence study with a final exam. Subjects include system concepts, interface with beacon systems, system tolerances, control circuits, monitor circuits, system alignment, and performance analysis.

Prerequisites: None
And one of the following: 40339, 45309, 45310, 40335

44324   Optical Disk Subsystem (ODS)

Training Manager: AMA-460 Course Length: 80 hour(s)

This course provides training for technicians and engineers on the Optical Disk Subsystem which consists of Versa Module Eurocard (VME) chassis, an optical disk expansion chassis, and a personal computer. The course is 80 hours correspondence study. Subjects include basic operation of the ODS, ODS software-related information, the VME chassis, input/output process BUS (IOPB) information, terminology including status words and commands, instruction on the optical drive, VME procedures including the CPU, BUS, and many components of the ODS boards.

Prerequisites: 42027
And one of the following: None

44325   Introduction to Radar Optimization

Training Manager: AMA-450 Course Length: 120 hour(s)

This course provides training for technicians, engineers, and system performance specialists on primary and secondary radar systems. The course is 100% correspondence study. Subjects include optimization fundamentals related to terminal and en route primary and secondary radar, antenna systems, transponders, and flight check and commissioning inspections. FAA Order 6300.13, Radar System Optimization and Flight Inspection Handbook is used as a primary study manual. Completion of this course is required prior to enrollment in course 40310 as this course serves as the first part of 40310.

Prerequisites: 44320
And one of the following: None

44326   Digital Video Mapper

Training Manager: AMA-450 Course Length: 8 hour(s)

This course provides training for technicians and engineers on the digital video mapper equipment. The course is 100% correspondence study. Subjects include description, components, basic and detailed circuit operation, corrective and preventive maintenance activities, alignments, and system installation.

**Prerequisites: None
And one of the following: None**

44327   Rms/MPS Interface Computer (Rmic)

Training Manager: AMA-440   Course Length: 8 hour(s)

This course provides training for technicians, engineers, and FAA Technical Center Personnel on the RMIC equipment. The course is 100% correspondence study. Subjects include operation, corrective maintenance procedures, and maintenance procedures.

**Prerequisites: 40381
And one of the following: None**

44328   Mode S BVR Hardware Maintenance

Training Manager: AMA-450   Course Length: 16 hour(s)

This course provides training for technicians on the Mode S Beacon Video Reconstitutor (BVR). The course is 3 hours self-study with 13 hours of computer exercises. Subjects include system operation, functional overview, functional description of site adaptation parameters (SAP), routine check (monitoring system operations), troubleshooting, reacting to failures, restoration after failures, preventive maintenance, diagnostic checks, definitions of messages, fault isolation, verifying program logic devices on boards, changing into and out of the interim beacon interrogator mode (Mode S backup), and ARTS IIA/modes s interface.

**Prerequisites: None
And one of the following: 40392, 42058, 88360**

44329 ASR-11 Hardware Maintenance

Training Manager: AMA-450   Course Length: 60 hour(s)

This course provides training for technicians, engineers, system performance specialists, FAA Technical Center personnel, and developmental technicians on ASR-11 primary surveillance radar (PSR) and monopulse secondary surveillance radar (MSSR). This course is 100% correspondence study with a computer simulation training aid (shipped with course materials) and two written exams. Subjects include PSR and MSSR theory of operation, block diagram signal flow, monopulse, false target elimination, MTD process, tracking, and troubleshooting. Completion of this course is required prior to enrollment in course 42069 as this course serves as the first part of 42069.

**Prerequisites: 42058
And one of the following: None**

44330 Air Traffic Control Beacon Interrogator-6 (ATCBI-6)

Training Manager: AMA-450   Course Length: 24 hour(s)

This course provides training for technicians and engineers who maintain and repair the ATCBI-6 System. This course is 24 hours correspondence study with a computer simulation that is packaged with the materials. The course covers basic radar theory, monopulse theory, CMS terminal operation, equipment description, system operation, configuration, and preventive maintenance. Completion of this course is required prior to enrollment in course 42063 as this course serves as the first part of 42063.

**Prerequisites: 42058
And one of the following: None**

44331   Motorola FT100S Data Service Unit/Channel Service Unit

Training Manager: AMA-440   Course Length: 24 hour(s)

This course provides training for installation and maintenance personnel on the Motorola FT100S Data Service Unit/Channel Service Unit (DSU/CSU). The course is 100% correspondence study with a final exam. It provides guidelines for implementing a national interface standard that connects the TDWR to the ITWS, using the Motorola FT100S DSU/CSU in conjunction with the Microwave Communications, Inc. (MCI) Lincs T1 Transmission Network. Subjects include functional/physical descriptions of the DSU/CSU, installation procedures, hardware configuration, option selection, maintenance/troubleshooting procedures, specifications, and a T1 overview on the North America T1 Digital T-Carrier System.

**Prerequisites: None
And one of the following: None**

44332   Motorola 3261FAST V.34 Modem

Training Manager: AMA-440   Course Length: 24 hour(s)

This course provides training for installation and maintenance personnel on the Motorola 3261FAST V.34 MODEM. The course is 100% correspondence study with a final exam. It provides guidelines for implementing a national interface standard connecting the AN/WSR-88 NEXRAD to the ITWS, using the Motorola 3261FAST V.34 Modem in conjunction with the Microwave Communications, Inc. (MCI) Lincs Transmission Network. Subjects include functional/physical descriptions of the Modem, installation/configuration procedures, testing/troubleshooting procedures, interface and cabling pinouts, and specifications.

**Prerequisites: None
And one of the following: None**

44333   WSP for Tracons

Training Manager: AMA-450   Course Length: 24 hour(s)

This course provides training for AF technicians, engineers, and Technical Center personnel on WSP for tracons. This course is 24

hours correspondence study w ith on-site labs and a supervised end-of-course exam. Subjects include system theory of operation, preventive and corrective maintenance actions, and operation of the maintenance display screens.

Prerequisites: None
And one of the following: None

44334   Airport Surveillance Radar Model 9 (ASR-9)

Training Manager: AMA-450 Course Length: 240 hour(s)

This course provides training for technicians and engineers on the Airport Surveillance Radar Model 9 (ASR-9). The course is 100% correspondence study w ith a computer simulation (packaged w ith materials) and a final exam. Subjects include ASR-9 hardw are overview , system control, transmitter, ASR-9 functional description, ASR-9 DSP equipment, ASR-9 radar post processor, ASR-9 display processors, maintenance display equipment, antenna, system radar 6-level 2-level receiver/processor/detector equipment, synchronizer, and 6-level synchronizer. This course is a prerequisite to the ASR-9 resident laboratory. Completion of both this course and the resident lab course is required to satisfy the

Prerequisites: 42058
And one of the following: None

44335   Remote Monitoring and Control (RMC)

Training Manager: AMA-440 Course Length: 24 hour(s)

This course provides training on the remote monitoring and control (RMC) equipment. Subjects include a functional description of the equipment, remote monitoring and control (RMC) hardw are functions, uninterruptible pow er supply (UPS) hardw are and operations, maintenance data terminal (MDT) operations, and RMC corrective maintenance.

Prerequisites: None
And one of the following: None

44336   TDX 2000 Digitizer

Training Manager: AMA-440 Course Length: 40 hour(s)

This course provides training for airw ay facilities technicians, engineers, system performance specialists, and FAA Technical Center personnel on the TDX 2000 Sensis Digitizer. The course is 25 hours correspondence study w ith 15 hours of field-conducted laboratory. Correspondence study subjects include equipment theory, operations, configuration, preventive maintenance, corrective maintenance, and other hardw are information. Lab subjects include operations, preventive maintenance, corrective maintenance, and troubleshooting.

Prerequisites: None
And one of the following: 40333, 40395

44337   STARS FS-1 to FS-2 Delta Training

Training Manager: AMA-490 Course Length: 24 hour(s)

This course is for ATSS' that have completed 42067 full STARS maintenance and their facilities are transitioning to FS-2 equipment and configuration. This course is 12 hours correspondence study addressing AIG routers and security and a stand-alone CD-ROM containing MCW familiarization and SSS practice. Course materials consist of 4 CD's w ith a student guide located on one of the CD's (no student guide w ill be shipped). CD's are not compatible w ith the AF CBI platform. Students need to be enrolled via the correspondence study online system to request end-of-course examination to complete course.

Prerequisites: 42067
And one of the following: None

44338   ITWS Remote Situation Display

Training Manager: AMA-440 Course Length: 24 hour(s)

This course provides training for airw ay facilities technicians on the ITWS remote situation display. This course is 24 hours correspondence study w ith a final examination. Subjects include the ITWS functional description and situation display overview , startup/shutdow n procedures, operation, and troubleshooting.

Prerequisites: None
And one of the following: None

44339   Channel Bank

Training Manager: AMA-440 Course Length: 10 hour(s)

This course provides training for Airw ay Facilities technicians on the channel bank. The course is 10 hours correspondence study w ith a field   laboratory component and final examination. Subjects include equipment theory, operation, preventive maintenance, corrective maintenance, and other hardw are information.

Prerequisites: None
And one of the following: None

44403   NAS Indoctrination for Engineers and Technicians

Training Manager: AMA-470 Course Length: 35 hour(s)

This course provides training for technicians on the subsystems w hich make up the NAS En Route Air Traffic Control System. The course is 100% correspondence study w ith three lessons and no final exam. Subjects include introduction to the National Airspace

System (NAS) and the functions of the major subsystems, with an overview of the subsystems which make up the NAS En Route Air Traffic Control System.

Prerequisites: 14039
And one of the following: None

44418   NADIN PSN Overview Course

Training Manager: AMA-480   Course Length: 40 hour(s)

This course provides training for engineers, technicians, computer operators, and NAS managers on the NADIN PSN. The course is 100% correspondence study with a final exam. Subjects include orientation to system hardware, software, and functional characteristics.

Prerequisites: None
And one of the following: None

44423   Maintenance Automation System Software (MASS)

Training Manager: AMA-480   Course Length: 32 hour(s)

This course provides training for air traffic systems specialists, engineers, and NAS/NOM personnel who are responsible for monitoring and controlling the National Airspace System hardware through the monitor and control function (MCF) of MASS. The course is 100% correspondence study with practice exercises that use the fielded MASS/MCF software on an MC Workstation/MDT connected to an OKC MPS system. Subjects include the MASS environment, monitoring subsystem status, subsystem parameters, remote control actions, and customizing features. Students must have knowledge of Windows 95 to complete the training. They should review the Windows 95 tapes on file at their site.

Prerequisites: None
And one of the following: None

44436   PAMRI Overview for Computer Operators

Training Manager: AMA-470   Course Length: 3 hour(s)

This course provides training for technicians on the Peripheral Adapter Module Replacement Item (PAMRI) system. The course is 100% correspondence study with an open book final exam. Subjects include hardware, software, and functional characteristics. This course is a prerequisite for all PAMRI training courses.

Prerequisites: None
And one of the following: None

44437   ACE Certification

Training Manager: AMA-480   Course Length: 4 hour(s)

This course provides training for technicians on the Automated Surface Observing System (ASOS) Controller Equipment (ACE). The course is 100% correspondence study. Correspondence study subjects include an overview of the ACE system and steps used to certify the ACE equipment.

Prerequisites: None
And one of the following: None

44438   Radar Data Acquisition Subsystem (RDAS)

Training Manager: AMA-480   Course Length: 40 hour(s)

This course provides training for technicians and engineers on Radar Data Acquisition Subsystem principles (primary radar, secondary radar, Mode S, and digitizers). The course is 100% correspondence study. Subjects include flow of radar data from the radar facility to the ARTCC, including reports from various analysis programs (QARS, EQARS, BFTA, and TDR).

Prerequisites: 47207
And one of the following: None

44439   IBM 6400 Line Matrix Printer

Training Manager: AMA-470   Course Length: 40 hour(s)

This course provides training for technicians, engineers, SPS's, FAA Technical Center personnel, and developmental technicians on the IBM 6400-05P line matrix printer. The course is 100% correspondence study. Subjects include theory of operation, maintenance procedures, diagnostics, and replacement and repair procedures. Students are required to perform exercises in printer setup, adjustment, and replacement/repair. Additional information is given in an addendum for the IBM 6400 P50, and 6400 050 printers.

Prerequisites: None
And one of the following: None

44440   DARC for Technicians, Delta Phase 1

Training Manager: AMA-470   Course Length: 24 hour(s)

This course provides Delta training for technicians on the DARC System, Type FA-9665, Phase 1 Display Processor (DP) replacement. The course is 100% correspondence study. Subjects include DP configuration changes, support console, and maintenance and diagnostic (M&D) changes.

Prerequisites: 43519
And one of the following: None

44441   DARC Software Specialists, Delta Phase 1

Training Manager: AMA-470   Course Length: 24 hour(s)

This course provides Delta training for system performance specialists on the DARC System, Type FA-9665, Phase 1 Display Processor (DP) replacement. The course is 100% correspondence study. Subjects include DP configuration changes, support console, and maintanace and diagnostic (M&D) changes.

Prerequisites: 43520
And one of the following: None

44442   DARC Operations, Delta Phase 1

Training Manager: AMA-470   Course Length: 8 hour(s)

This course provides Delta training for NAS managers on the DARC System, Type FA-9665, Phase 1 display processor (DP) replacement. The course is 100% correspondence study. Subjects include DP configuration changes and support console messages.

Prerequisites: 43006
And one of the following: None

44443   Maintenance Management System for Users

Training Manager: AMA-480   Course Length: 40 hour(s)

This course provides training for technicians and engineers on the Maintenance Management System (MMS). The course is 100% correspondence study. Subjects include using the maintenance terminal and all MMS functions. This course will be available the second quarter of FY-2001.

Prerequisites: None
And one of the following: None

44444   NAS Overview for Control Center Specialists

Training Manager: AMA-480   Course Length: 40 hour(s)

This course provides overview training for control center specialists on the equipment and services comprisiing the National Airspace System (NAS). The course is 100% correspondence study. Subjects include overview of equipment located at FAA sites, services, NAS Infrastructure Management System (NIMS), role of control center specialist in NIMS and NAS, typical flight pattern, and future projections for NAS.

Prerequisites: None
And one of the following: None

44445   Integrated Term Weather Sys (ITWS) OPS for AFCC Spec

Training Manager: AMA-430   Course Length: 24 hour(s)

This course is intended for trained AF control center specialists who remotely monitor the National Airspace System (NAS). This 100% correspondence study course trains the specialist to evaluate on-going Integrated Terminal Weather System (ITWS) operations through remote monitoring and minimize NAS impact in the event of ITWS equipment failure. Subjects include system description, system operations, and remote maintenance monitoring information.

Prerequisites: 44423
And one of the following: None

44446   AFCC Website Familiarization

Training Manager: AMA-480   Course Length: 16 hour(s)

The course is for supervisory personnel who will be using the AFCC website to perform callback and site information maintenance procedures. This course is a self-paced correspondence study, consisting of lessons in the student guide and demonstrations on an accompanying CD-ROM. Students will perform hands on lab exercises at an AFCC website console.

Prerequisites: None
And one of the following: None

44506   General Maintenance Handbook

Training Manager: AMA-450   Course Length: 40 hour(s)

This course provides proficiency training for developmental technicians on maintenance concepts of the NAS in the FAA. The course is 100% correspondence study with six lessons and no final exam. Subjects include definitions, technical documentation, technical requirements and procedures, use of facility maintenance forms, inspection programs, joint acceptance, flight inspections, service interruptions and restoration, and certification of all FAA facilities and services. There are reading assignments in FAA Order 6000.15C, General Maintenance Handbook for Airway Facilities.

Prerequisites: None
And one of the following: None

44511   Electronic Test Equipment

Training Manager: AMA-420   Course Length: 85 hour(s)

This course provides training for developmental technicians on a wide variety of test equipment. The course is 100% correspondence study with six units and a final exam. Subjects include theory and application of analog and digital meters, oscilloscopes, frequency generation, frequency measurements, and special measuring instruments.

Prerequisites: None
And one of the following: 44013, 44020, 88440

44516   Radiation Hazard Theory and Measurement

Training Manager: AMA-450   Course Length: 40 hour(s)

This course provides training for technicians and engineers on radiation measurement procedures. The course is 100% correspondence study. Subjects include electromagnetic radiation characteristics; radiation theory, instrumentation, agency policy and standards; units of measure; ionizing radiation measurements and procedures; hydrogen thyratron operating hazards; pulsed non-ionizing measurements, calculations and procedures; continuous wave (CW) non-ionizing measurement, calculations, and procedures; routine and non-routine measurements; measurement of a radar; and high frequency CW source measurements.

Prerequisites: None
And one of the following: None

44714   Substitute for Knowledge of ESS Concepts/PVE-1000

Training Manager: AMA-430   Course Length: 0 hour(s)

This prerequisite validation examination provides training for technicians on basic knowledge of environmental system support (ESS) concepts. Subjects include DC circuits, batteries, switches, controls, AC circuits, transformers, motors, generators, and rectifiers.

Prerequisites: None
And one of the following: None

44715   ILS Basic Theory

Training Manager: AMA-420   Course Length: 65 hour(s)

This course material prepares technicians for for Course 40283, Theory of ILS. Subjects include Instrument Landing System (ILS) principles, components of a complete ILS, waveforms peculiar to the ILS, and amplitude modulation.

Prerequisites: None
And one of the following: None

44716   Study Material for ILS Markers/PVE-1203

Training Manager: AMA-420   Course Length: 0 hour(s)

This field study material prepares technicians for prerequisite validation examination (PVE)-1203, which is the prerequisite to all resident Instrument Landing System (ILS) marker courses. Subjects include the ILS marker station, marker antenna arrays, and measurements and adjustments.

Prerequisites: None
And one of the following: None

44717   Study Material for ILS Localizers/PVE-1204/1205

Training Manager: AMA-420   Course Length: 0 hour(s)

This field study material prepares technicians for prerequisite validation examination (PVE)-1204/1205. The material is presented in two sections. Subjects include localizer radiation patterns, types of localizer antennas, radiated modulation components, Manual FV108, and antennas and radiation patterns.

Prerequisites: None
And one of the following: None

44718   Study Material for ILS Glide Slope/PVE-1206/1207

Training Manager: AMA-420   Course Length: 0 hour(s)

This field study material prepares technicians for prerequisite validation examination (PVE)-1206/1207. The material is presented in two sections. Subjects include Instrument Landing System (ILS) glideslope radiation patterns and radiated modulation components.

Prerequisites: None
And one of the following: None

44719   Study Material for Mark 1D Antenna System/PVE-1301

Training Manager: AMA-420   Course Length: 0 hour(s)

This field study material prepares technicians for prerequisite validation examination (PVE)-1301. Subjects include introduction to the LOG periodic antenna and theoretical calculations associated with it.

Prerequisites: None
And one of the following: None

44720   Null Reference Glideslope Antenna System, PVE-1302

Training Manager: AMA-420   Course Length: 0 hour(s)

This field study material prepares technicians for prerequisite validation examination (PVE)-1302. Subjects include introduction to capture effect radiation patterns, amplitude and phase control units, transmitting antennas, and monitoring.

Prerequisites: None
And one of the following: None

44721   Study Material for Capture Effect Glideslope/PVE-1303

Training Manager: AMA-420 Course Length: 0 hour(s)

This field study material prepares technicians for prerequisite validation examination (PVE)-1303. Subjects include an introduction to capture effect radiation patterns, amplitude and phase control unit, transmitting antennas, and monitoring.

Prerequisites: None
And one of the following: None

44722 Sideband Reference Glideslope

Training Manager: AMA-420 Course Length: 35 hour(s)

This field study material provides training on the sideband reference glideslope. Subjects include an introduction to the sideband reference amplitude and phase control unit, transmitting antennas, and monitoring.

Prerequisites: None
And one of the following: None

44723 Study Material for Localizer With APC-TWA/PVE-1305

Training Manager: AMA-420 Course Length: 0 hour(s)

This field study material is an introduction to the Localizer Traveling Wave Antenna System, FA-9323 RF network, recombining and monitoring circuitry, and some theoretical calculations for the array. It prepares the student for the prerequisite validation examination (PVE)-1305.

Prerequisites: None
And one of the following: None

44724 Study Material for Localizer With V-Ring/PVE-1306

Training Manager: AMA-420 Course Length: 0 hour(s)

This field study material is an introduction to the V-Ring Antenna System. It discusses power distribution, monitoring, and calculations peculiar to the V-Ring Antenna System. It prepares the student for the prerequisite validation examination (PVE)-1306.

Prerequisites: None
And one of the following: None

44725 Study Material for Localizer With ALF 8-Loop/PVE-1307

Training Manager: AMA-420 Course Length: 0 hour(s)

This field study material is an introduction to the Alford 8-loop Antenna System, the amplitude and phase control unit, radiation patterns,

proximity effects of the 8-loop array, and system adjustments. It prepares the student for the prerequisite validation examination (PVE)-1307.

Prerequisites: None
And one of the following: None

45011 Radiation Hazard

Training Manager: AMA-405 Course Length: 32 hour(s)

The purpose of this training is to cover the requirements of FAA policy for radiation measurements and reporting as outlined in Order 3910.3A. The Office of Spectrum Policy and Management (ASR) and the regional Frequency Management Officers measure radiation levels for existing and new ly commissioned radar. This course provides information about various types of radar used in the National Airspace System and equipment required to perform radiation hazard measurements.

Prerequisites: None
And one of the following: None

45012 ATIS/HIWAS Digital Recorder System

Training Manager: AMA-480 Course Length: 28 hour(s)

This course provides training for technicians on airport terminal information services (ATIS)/Hazardous In-flight Weather Advisory Service (HIWAS) Digital Recorder System, Type FA-10146. The course is 100% field-conducted training. Subjects include analysis of the channel digital recorders (CDR), monitor and alarm panel (MAP), and remote control unit to the input/output level. Performance exercises are included to develop skills in adjustment procedures, preventive maintenance procedures, and trouble analysis.

Prerequisites: None
And one of the following: 44415, 44020

45014 AN/GRT-21/22 and AN/GRR-23/24

Training Manager: AMA-410 Course Length: 50 hour(s)

This course provides training for technicians on VHF and UHF Communications Equipment, Models AN/GRR-23/24 and AN/GRT-21/22. The course is 100% field-conducted training. Subjects include theory of operation, alignment, and performance checks.

Prerequisites: 47504
And one of the following: None

45015 Remote Readout Hygrothermometer, Model 94F/50

Training Manager: AMA-410 Course Length: 80 hour(s)

This course provides training for technicians on the remote readout Hygrothermometer, Type FA-9638. The course is 100% field-conducted lab. Subjects include functional operation, voltage measurements, alignment, and calibration.

Prerequisites: 44416
And one of the following: None

45016   Runway Visual Range (RVR) Eqmt Type FA-7861, Fld-Cdt Lab

Training Manager: AMA-420   Course Length: 16 hour(s)

This course provides training for technicians on the RVR (SSR), Type FA-7861. The course is 100% field-conducted lab. Subject areas include transmissometer, signal data converter, and remote data distribution.

Prerequisites: 40213
And one of the following: None

45017   Direction Finder 5530 and Remoting Equipment 5571/5572

Training Manager: AMA-410   Course Length: 40 hour(s)

This course provides training for technicians on DDirection Finder 5530 and Remoting Equipment 5571/5572. The course is 100% field-conducted lab. Subjects include evaluation of the system operation, performing routine maintenance, and troubleshooting. For facilities requiring remoting cables.

Prerequisites: None
And one of the following: None

45018   Radio Frequency Interference (RFI) Resolution

Training Manager: AMA-410   Course Length: 48 hour(s)

This course provides training for technicians on identifying, analyzing, locating, and resolving radio frequency interference (RFI) that could affect the safe operation of communication, navigation, and surveillance facilities in the NAS. The course is 29 hours field lecture and 19 hours field laboratory. Lectures include types of RFI including brute force, intermodulation, image, broadcast TV and radio, and RFI locating techniques. Laboratory includes direction-finding exercises (held outdoors at the Technical Center and surrounding areas) and spectrum analyzer and intermodulation demonstrations. Candidates selected from nominees submitted to and travel/per diem funded by ASR-1.

Prerequisites: None
And one of the following: None

45019   Teledyne Runway Visual Range (RVR)

Training Manager: AMA-420   Course Length: 32 hour(s)

This course provides training for technicians, engineers, and FAA Technical Center personnel on the runway visual range type 10268/1-6. The course is 12 hours correspondence study and 20 hours on-the-job training (OJT). Subjects include system overview, visibility sensor (VS), ambient light sensor (ALS), current sensors (CS), sensor interface electronics (SIE), data processing unit (DPU), controller display (CD) operations, standards and tolerances, and periodic maintenance procedures. Course requires station copy of TI 6560.17 for reference and access to the Teledyne RVR System for the OJT portion of the course.

Prerequisites: None
And one of the following: None

45020   Teledyne RVR Field Conducted Lab

Training Manager: AMA-420   Course Length: 16 hour(s)

This course provides training for airway Facilities personnel on the Runway Visual Range, Type 10268/1-6. This course is 16 hours field-conducted lab. Subjects include a system overview, visibility sensor (VS), ambient light sensor (ALS), current sensors (CS), sensor interface electronics (SIE), data processing unit (DPU), controller display (CD) operations, standards, and tolerances, and periodic maintenance procedures. course requires TI 6560.17, 6560.31, and 6990.2 for reference and access to the Teledyne RVR System.

Prerequisites: 44222
And one of the following: None

45021   NexCom Multimode Digital Radio (MDR) (Analog) OJT

Training Manager: AMA-410   Course Length: 78 hour(s)

The NexCom multimode digital radio (analog) OJT course is currently estimated to be 78 hours such as duration, 45 hours of study time and 33 hours of instructional time, the course will be used to acquire proficiency in overall equipment maintenance, operation, adjustment and evaluation, general issues, safety, and coordination.

Prerequisites: None
And one of the following: None

45103   Lightning and Transient Protection Theory

Training Manager: ANS-600   Course Length: 16 hour(s)

This course provides training for technicians, engineers, and NAS managers on the principles used in designing and installing lightning protection, transient protection, surge protection, and grounding systems for FAA facilities. The course is 100% field-conducted lecture. Subjects include installation and maintenance of appropriate protection systems and resolving problems with existing systems.

Prerequisites: None
And one of the following: None

45108 Static Switch Removal and Replacement

Training Manager: AMA-430   Course Length: 4 hour(s)

This course provides training for technicians, engineers, and developmental technicians on the STS-SP-208Y-150/150, Series STS-HD, Static Transfer Switch. The course is 10% videotape and 90% field-conducted lab. The videotape demonstrates removal and replacement of a PSCS Series STS-HD, static switch in an ASCO-940 enclosure and removal and replacement of cooling/exhaust fans and filters. Lab subjects include removal and replacement of fans and filters, demonstration of removal/replacement of static switch, and demonstration of static switch operation and diagnostic functions. Required tools include the designated PSCS static switch lifting device, torque wrench, and VCR.

Prerequisites: None
And one of the following: None

45110 ARTCC Critical and Essential Power System (ACEPS)

Training Manager: AMA-430   Course Length: 96 hour(s)

This course provides training for airway facilities technicians, engineers, specialists, and FAA Technical Center personnel on the ARTCC Critical and Essential Power System (ACEPS). This course is 96 hours field-conducted laboratory. Subjects include fundamental knowledge and location of ACEPS equipment and components.

Prerequisites: 47112
And one of the following: None

45111 DRPDS Bridge Training

Training Manager: AMA-430   Course Length: 80 hour(s)

This course provides Dual Redundant Power Distribution System (DRPDS) bridge training for AF technicians and system performance specialists who have attended Course 48316, Dual Redundant Power Distribution System hardware maintenance. This course is taught at field locations by Academy instructors and is 30 hours field lecture and 50 field laboratory. Lecture subjects include the DEC-340 controller, Dry Contact Dit, Kohler PSG, Square D, breakers, SMS-3000 software, concept software, Powerware Plus (UPS), and PDI (SATS, PDU, and CDPS). Lab subjects include setup, operation, and troubleshooting of the above equipment.

Prerequisites: 48316
And one of the following: 81489, 97534, 91283, 93356

45112 Exide UPS System OJT

Training Manager: AMA-430   Course Length: 58 hour(s)

This course provides proficiency training for AF technicians on the Exide PCS System. The course is 58 hours formal OJT. Subjects include equipment maintenance performance check, operation and adjustment, and description of the power feed, and power distribution throughout the equipment.

Prerequisites: 40149
And one of the following: None

45114 Critical Redundant Power Distribution System (CRPDS)

Training Manager: AMA-430   Course Length: 232 hour(s)

This course provides training for technicians on how to troubleshoot, maintain, and repair the equipment comprising the Critical Redundant Power Distribution System (CRPDS). Subjects include CRPDS sSystem overview , Kohler engine generators and controls, DEC340 controller, Square D Switchgear, Exide BPIII UPS, static automatic transfer switch (SATS), power distribution unit (PDU), Power Monitor and Control System (PMCS) and auxiliary equipment. This training will be approximately 116 hours field lecture and 116 hours field laboratory.

Prerequisites: None
And one of the following: 44111, 44117

45205 Model 1118 DME Enhanced Remote Maintenance Monitoring

Training Manager: AMA-420   Course Length: 20 hour(s)

This course provides bridge training for technicians and engineers on the ASII Model 1118 Distance Measuring Equipment (DME) with enhanced remote maintenance monitoring. The course is 12 hours correspondence study and 8 hours field laboratory. Correspondence study subjects include circuit card overview ; technical description; ERMM computer and interface; installation and checkout; data screens; tests; power supply alert limits; and data collection. Field laboratory subjects include adjustments and maintenance procedures. Students who have not taken 40278 should enroll in 43800.

Prerequisites: 40278
And one of the following: None

45206 ILS Maintenance Requirements and Procedures

Training Manager: AMA-420   Course Length: 27 hour(s)

This course provides training for personnel on procedures for maintaining and certifying Instrument Landing System (ILS) facilities. The course is 100% field lecture. Subjects include the user's perspective of the ILS, localizer and glideslope requirements and arrays, ILS recordkeeping and maintenance issues, certification

concepts and policy, non-directional beacon flight inspection issues, navigation-related test equipment, flight inspection techniques, NASE program, litigation and tort law as related to AF experiences.

Prerequisites: None
And one of the following: None

45207   Mark 20 ILS OJT

Training Manager: AMA-420   Course Length: 120 hour(s)

This course provides proficiency training for AF technicians on the Mark 20 ILS. The course is 120 hours of OJT. Subjects include maintenance and flight inspection requirements and procedures, in addition to all required procedures on the Mark 20 ILS performance exam.

Prerequisites: 40283
And one of the following: None

45208   LLWAS Relocation and Sustainment (LLWAS-RS) OJT

Training Manager: AMA-420   Course Length: 16 hour(s)

This course provides proficiency training for AF technicians on the Low Level Windshear Alert System-Relocation and Sustainment (LLWAS-RS). The course is 16 hours of OJT which includes 8 hours of student study time plus 8 hours of instructor time. Subjects include the radio MODEM procedures, remote station procedures, master station procedures, and removal and replacement procedures.

Prerequisites: 40291
And one of the following: None

45209   VHF Omnidirectional Range Transmitter (VOT), Fld Cdt Lab

Training Manager: AMA-420   Course Length: 40 hour(s)

This course provides training for technicians and engineers on Very High Frequency Omnidirectional Range (VOR) Systems (Marconi VOT Type FA-10235). The course is 100% field-conducted lab. Subjects include operations and alignment.

Prerequisites: None
And one of the following: 40276, 40284, 47701

45210   MK-1F ILS OJT

Training Manager: AMA-420   Course Length: 210 hour(s)

This course provides proficiency training for AF technicians on the MK-1F Instrument Landing System (ILS). The course is 210 hours of on-the-job training (OJT) representing 108 hours of study time and 102 hours of instructional time. Subjects include system/equipment

operation and performance, troubleshooting/diagnostic tools/test equipment, equipment maintenance and restoration activities, flight inspection, and facility drawings.

Prerequisites: 47715, 47716
And one of the following: 40233, 40283

45313   Remote Tower Alphanumeric Display System (RTADS) Hardware

Training Manager: AMA-460   Course Length: 120 hour(s)

This course provides training for technicians on the ARTS IIIA Remote Display Buffer Memory (RBDM). The course is 60 hours field lecture and 60 hours field laboratory with a supervised final. Lecture subjects include RDBM theory of operation and interface. Laboratory subjects include diagnostics, operation, and troubleshooting.

Prerequisites: 42027
And one of the following: None

45314   Remote Tower Alphanumeric Display System (RTADS) Software

Training Manager: AMA-460   Course Length: 120 hour(s)

This course provides training for technicians, engineers, and FAA Technical Center personnel on remote display buffer memory (RDBM) software. The course is 72 hours field lecture and 48 hours field laboratory. Lecture subjects include system data flow overview, flow diagram analysis of specific RDBM program tasks, interpretation of status and error message processing and printouts, programming techniques for the communications multiplex controller (CMC) and the RDBM, ultra review and interrupt handling, and programming the differences between multiplexed display buffer memory (MDBM), and the RDBM. Laboratory subjects include programming the RDBM via CMC. The laboratory is optional.

Prerequisites: None
And one of the following: 41328, 42037

45328   Low Density Radio Communications Link (23GHz)

Training Manager: AMA-440   Course Length: 32 hour(s)

This course provides training for technicians and engineers on the Micronet 23 GHz Radio Model 4248 Low Density Radio Communications Link. The course is 100% field-conducted training. Subjects include Wescom 360-22 D4 digital carrier terminal; microwave networks Micronet 23 GHz digital radio; switchmode and Ferro power supplies; and annual maintenance, alignment, and operation.

Prerequisites: 44321
And one of the following: None

45331   Airport Surveillance Radar-9 (ASR-9) OJT

Training Manager: AMA-450   Course Length: 167 hour(s)

This course provides proficiency training for AF technicians on the Airport Surveillance Radar-9 (ASR-9). The course is 167 hours OJT. Subjects include the ASR-9 System, Type FA10064, ASR-9 Antenna Tower, ASR-9 computer console, and other required procedures on the ASR-9 performance exam.

Prerequisites: 40337
And one of the following: None

45332   Automated Radar Terminal System (ARTS) IIE OJT

Training Manager: AMA-460   Course Length: 133 hour(s)

This course provides proficiency training for airway facilities technicians on the Automated Radar Terminal System (ARTS) IIE. This course is 133 hours OJT. Subjects include acquisition processing cabinet, aural alarm control unit, decoding data acquisition system, code select box, remote control box, interfacility data set, Radar Alphanumeric Display System (RADS), display control processor, and keyboard.

Prerequisites: 42039
And one of the following: None

45334   Terminal Doppler Weather Radar (TDWR) OJT

Training Manager: AMA-440   Course Length: 70 hour(s)

This course provides proficiency training for AF technicians on the Terminal Doppler Weather Radar (TDWR). The course is 70 hours of on-the-job training (OJT). Subjects include system/equipment operation/performance, MDT logon/logoff procedures, system diagnostics, Radar Product Generator, remote maintenance, power distribution and emergency power procedures, and periodic maintenance.

Prerequisites: 40313
And one of the following: None

45335   ARSR-3 OJT

Training Manager: AMA-440   Course Length: 85 hour(s)

This course provides proficiency training for AF technicians on the Air Route Surveillance Radar (ARSR)-3. The course is 85 hours of on-the-job training (OJT). Subjects include equipment maintenance, operation, adjustment, and evaluation.

Prerequisites: 40388
And one of the following: None

45336   Mode-S OJT

Training Manager: AMA-450   Course Length: 137 hour(s)

This course provides proficiency training for AF technicians on the Mode Select Beacon System (Mode-S). The course is 137 hours of on-the-job training (OJT). Subjects include equipment performance check, operation, and adjustment.

Prerequisites: 40398
And one of the following: None

45337   ASR-8 OJT

Training Manager: AMA-450   Course Length: 87 hour(s)

This course provides proficiency training for AF technicians on the Airport Surveillance Radar-8 (ASR-8). The course is 87 hours of on-the-job training. Subjects include equipment performance check, operation, and adjustment.

Prerequisites: 40333
And one of the following: None

45339   Full Service-1 STARS ATSS Delta Maintenance

Training Manager: AMA-490   Course Length: 80 hour(s)

This course provides training for systems specialists previously trained on the operation and maintenance of the STARS Early Display (EDC) to operate and maintain the Full Service-1 STARS. This course is 32 hours field lecture and 48 hours field lab. Lecture subjects include identification of system components. Lab subjects include component and system troubleshooting.

Prerequisites: 40423, 42038, 88440, 88441
And one of the following: None

45340   Common Digitizer CD-2A/B/C/D OJT

Training Manager: AMA-440   Course Length: 28 hour(s)

This course provides proficiency training for AF technicians on the Common Digitizer Models CD-A/B/C/D. This course is 28 hours of on-the-job training (OJT). There will be approximately 15 hours of study time and approximately 13 hours of instructional time. Subjects include system/equipment operation and performance.

Prerequisites: 43549
And one of the following: None

45341   ATCBI-6 OJT

Training Manager: AMA-450   Course Length: 60 hour(s)

This course provides proficiency training for airway facilities technicians on the ATCBI-6. This course is 60 hours on-the-job training (OJT). Subjects include system interface unit (SIU), communications cabinet equipment, MSSR general, MSSR local maintenance terminal (LMT), single channel site monitor, and monopulse beacon test set.

Prerequisites: 42063, 44330
And one of the following: None

45342   ARSR-4 OJT

Training Manager: AMA-440   Course Length: 135 hour(s)

This course provides proficiency training for AF technicians on the Air Route Surveillance Radar-4 (ARSR-4). The course includes 82 hours of study time and 53 hours of instructional time. Subjects include equipment maintenance, operation, adjustments, evalution, and all required procedures for the ARSR-4 performance examination.

Prerequisites: None
And one of the following: None

45343   Direct Access Radar Channel (DARC) OJT

Training Manager: AMA-470   Course Length: 37 hour(s)

This course provides proficiency training for AF technicians on the Direct Access Radar Channel (DARC). The course is 37 hours of OJT which includes 20 hours of student study time plus 17 hours of instructor time. Subjects include system familiarization, IOT/LP PC operational maintenance procedures, magnetic tape unit, functional system checkout, and system operations.

Prerequisites: 43519
And one of the following: None

45344   ARTS-IIIA OJT

Training Manager: AMA-460   Course Length: 199 hour(s)

This course provides proficiency training for AF technicians on the Automated Radar Terminal System, ARTS-IIIA. The course includes 81 hours of study time and 118 hours of instructional time. Subjects include equipment maintenance, operation, adjustments, evaluation and all required procedures for the ARTS-IIIA performance examination.

Prerequisites: None
And one of the following: None

45345   Micro-EARTS Remote Display Maintenance

Training Manager: AMA-460   Course Length: 40 hour(s)

This course provides training on Micro-EARTS remote display

maintenance for airway facilities technicians, engineers, and FAA Technical Center personnel. This course is 27 hours field lecture and 13 hours field lab. Lecture includes an introduction to the MEARTS, principles and modes of operation, hardware interfaces, inputs/outputs, system documentation, RCW hardware, display presentation, keyboard entries, RCS software structure and scripts, maintenance routines, certification, and removal and replacement. Lab includes system introduction and familiarization, X-Windows/Solaris and script usage, RCW maintenance and certification routines, and RCW LRU removal, replacement and configuration.

Prerequisites: None
And one of the following: None

45346   Full Service STARS ATSS Maintenance

Training Manager: AMA-490   Course Length: 88 hour(s)

This course provides training for qualified system specialists on the STARS Automation sSystem used in Terminal Radar Approach Control facilities. The course is 88 hours field-conducted lecture. Lecture subjects include an introduction to the system, system operation, Sony monitor, and system components.

Prerequisites: 88440, 88441
And one of the following: 12751, 40423

45347   Full Service STARS ATSS Maintenance (Lab)

Training Manager: AMA-490   Course Length: 152 hour(s)

This course provides training for qualified system specialists on the STARS Automation System. This course is 152 hours of field-conducted laboratory and is to be taken following course 45346. Laboratory subjects include hands-on learning and detailed component and system troubleshooting.

Prerequisites: 45346
And one of the following: None

45350   TDWR System With RPG Upgrade OJT

Training Manager: AMA-440   Course Length: 70 hour(s)

This course provides proficiency training for AF technicians on the Terminal Doppler Weather Radar (TDWR). The course is 70 hours of on-the-job training (OJT). Subjects include system/equipment operation/performance, MDT logon/logoff procedures, system diagnostics, radar product generator, remote maintenance, power distribution and emergency power procedures, and periodic maintenance.

Prerequisites: 40313
And one of the following: None

45411 Weather Message Switching Center Replacement (WMSCR)

Training Manager: AMA-480   Course Length: 24 hour(s)

This course provides training for technicians on the operational software program for the WMSCR System. The course consists of 12 hours field lecture and 12 hours field laboratory. Lecture and laboratory subjects include writing, debugging and executing programs, updating and modifying adaptation parameters, and executing maintenance and diagnostic programs.

Prerequisites: None
And one of the following: 44415, 44020

45412 Weather Message Switching Center Replacement(WMSCR) Hardware

Training Manager: AMA-480   Course Length: 40 hour(s)

This course provides training for technicians on the WMSCR System. The course consists of 20 hours field lecture and 20 hours field laboratory. Lecture subjects include system theory of operation, fault diagnosis and isolation, and system performance analysis. Laboratory subjects include system analysis, fault diagnosis, troubleshooting procedures, and routine checks and adjustments.

Prerequisites: 44012
And one of the following: 44013, 44020

45413 WMSCR for Operators

Training Manager: AMA-480   Course Length: 120 hour(s)

This course provides training for network operations personnel assigned to monitor and control the network for the WMSCR System. The course is 60 hours field lecture and 60 hours field laboratory. Subjects include network interconnections between WMSCR, NADIN 1 MSN, NADIN II PSN (packet switching network), AWP (aviation weather processor), and end-user equipment; system menus and network control functions; network monitoring tools; system troubleshooting (network control, not physical equipment); system control (shutdown n/startup, application loading, database structures); and weather data collection, break down, storage, assembly, and distribution.

Prerequisites: None
And one of the following: None

45415 Simplified Automated Logging (SAL) Field-Conducted Lab

Training Manager: AMA-480   Course Length: 36 hour(s)

This course provides training for technicians, engineers, system performance specialists, NAS managers, and air traffic control specialists on SAL, used with the Tandem Himalaya RISC processor and maintenance diagnostic terminal (MDT). SAL is a Windows-based automated logging tool for recording and reviewing maintenance activities, which uses data from the Maintenance Management Software (MMS) Databases stored on the Maintenance Processing System (MPS). The course is 100% field-conducted lab. Subjects include introduction to SAL, SAL basics, recording SAL entries, using SAL entry tools and reviewing SAL entries and tools for advanced users.

Prerequisites: None
And one of the following: None

45419 FDIO 3 PC-RCU Maintenance, Field Conducted Lab

Training Manager: AMA-480   Course Length: 24 hour(s)

This course provides training for technicians on the FDIO 3 PC-RCU equipment. The course is 100% field-conducted lab. Subjects include operation, configuration, performance check, and fault isolation.

Prerequisites: 44012
And one of the following: 44013, 44020

45420 NADIN PSN Network Control Center (NCC) Operator, FldCdt Lab

Training Manager: AMA-480   Course Length: 48 hour(s)

This course provides training for technicians and computer operators on the NADIN Packet Switch Network. The course is 100% field-conducted lab. Subjects include simulated operations, control, and configuration and reconfiguration of network components.

Prerequisites: 43027
And one of the following: None

45421 FDIO ATCT Hardware Maintenance Field-Conducted Lab

Training Manager: AMA-480   Course Length: 32 hour(s)

This course provides training for technicians on FDIO ATCT equipment manufactured by Wespercorp. The course is 100% field-conducted lab. Subjects include basic concepts, configuration, block diagram level data flow, diagnostics, and troubleshooting. A 386 personal computer with Windows 3.1 or higher is required to take this course.

Prerequisites: None
And one of the following: None

45425 Aviation Weather Processor (AWP)

Training Manager: AMA-480   Course Length: 80 hour(s)

This course provides training for system performance specialists on the Aviation Weather Processor System. The course is 40 hours field lecture and 40 hours field lab. Lecture subjects include procedures to operate and maintain the AWP system in support of the Flight Service Automation System and its Model-1 full capacity systems. Laboratory subjects include operation, maintenance, performing software loads, and starting/stopping the AWP system.

Prerequisites: None
And one of the following: None

45426 DSR Computer Operator

Training Manager: AMA-470 Course Length: 32 hour(s)

This course provides training for computer operators on the Display System Replacement (DSR). The course is 16 hours correspondence study and 16 hours field-conducted lab. Correspondence study subjects include system overview, tape management, RISC-6000 processor startup and operation, tape drives, printers, terminals, and flight strip printer control unit. OJT subjects include hands-on activities with a Lockheed Martin site support team at the ARTCC. A graded exam ends the course.

Prerequisites: None
And one of the following: None

45429 FDIO for ARTCC's Field-Conducted Lab

Training Manager: AMA-480 Course Length: 20 hour(s)

This course provides training for technicians and engineers on the Flight Data Input/Output (FDIO) for Air Route Traffic Control Centers (ARTCC's). The course is 100% field-conducted lab. Subjects include system overview, CCU, power distribution, power up, front panel operation, GPI/GPO, MBCC assembly, LAN assembly, and troubleshooting.

Prerequisites: None
And one of the following: None

45430 Weather and Radar Processor (Warp Monitor and Control WS)

Training Manager: AMA-480 Course Length: 24 hour(s)

This course provides training for AMCC personnel to monitor and control the Weather and Radar Processor (WARP) System. The course is conducted by Academy personnel at various field locations. Subjects include weather systems overview, WARP overview, WARP external interfaces, NEXRAD overview, general functions, setup, alarms, and system mitigation. A graded exam is given at the end of the course.

Prerequisites: None
And one of the following: None

45432 Display System Replacement (DSR) OJT

Training Manager: AMA-470 Course Length: 192 hour(s)

This course provides proficiency training for AF technicians on the Display System Replacement (DSR). The course is 192 hours OJT. Subjects include the console test bench (CTB), printer control unit (PCU), DSR support equipment, DSR rack mounted support processors, DSR control room hardware, DSR local communications network (LCN), DSR LCN rack-mounted processors, DSR backup communication network (bcn), and DSR BCN rack-mounted processors in addition to all required procedures on the DSR performance exam.

Prerequisites: None
And one of the following: 40441, 43556, 48244

45433 Aviation Weather Processor (AWP) Field Conducted Lab

Training Manager: AMA-480 Course Length: 57 hour(s)

This course provides proficiency training for AF technicians on the Aviation Weather Processor (AWP). The course is 57 hours of field-conducted lab. Subjects include AWP System familiarization, AWP weather edits, and AWP System control.

Prerequisites: 43005
And one of the following: None

45434 AFCC Website Familiarization

Training Manager: AMA-480 Course Length: 16 hour(s)

This course provides training for airway facilities managers and coordinators who utilize the AFCC website. The course is 12 hours field lecture and 4 hours field laboratory. Lecture subjects include the AFCC website access levels, callback functions, priority levels, availability, phone numbers, reports, extras function, and links. Lab subjects include accessing the AFCC website, MCC callback page, changing availability and/or phone numbers, logging on the facility callback, editing site information, generating reports, using the extras function, accessing local links, and using the feedback function. A graded exam is given at the end of the course.

Prerequisites: None
And one of the following: None

45435 Stand Alone Weather Sensors (SAWS) System OJT

Training Manager: AMA-480 Course Length: 22 hour(s)

This course provides proficiency training for AF technicians on the Stand Alone Weather Sensors (SAWS) System. The course is 22 hours of OJT. Subjects include system configuration, system operation, technical procedures, system malfunctions, and troubleshooting, in addition to all required procedures on the saws

performance exam.

Prerequisites: None
And one of the following: None

45436 Integrated Terminal Weather System (ITWS) OJT

Training Manager: AMA-480 Course Length: 16 hour(s)

This course provides proficiency training for AF technicians in the Integrated Terminal Weather System (ITWS). The course is 16 hours OJT which includes 8 hours of student study time and 8 hours of instructor time. Subjects include the product generator (PG), situation display (SD), and the test tool (TT).

Prerequisites: 40621
And one of the following: None

45437 EFSTS Hardware Maintenance

Training Manager: AMA-480 Course Length: 24 hour(s)

This course provides training for airway facilities technicians and engineers on EFSTS hardware maintenance. This course is 12 hours field lecture and 12 hours field laboratory with a final examination. Lecture subjects include preventive and corrective maintenance and fault isolation procedures. Laboratory subjects include performance checks, troubleshooting, and preventive and corrective maintenance tasks.

Prerequisites: None
And one of the following: None

45438 CCCH System, FAA HOCSR-Only OJT

Training Manager: AMA-470 Course Length: 16 hour(s)

This course provides on-the-job training (OJT) for technicians, NAS/NOM personnel, systems performance specialists, and developmental technicians on the Central Computer Complex HOST (CCCH) System, FAA HOST and Oceanic Computer System Replacement (HOCSR) Phase 3 - only. This training will prepare the student to operate HOCSR Phase 3 equipment, to run server diagnostics, to isolate, checkout, reintroduce, configurate/reconfigurate the equipment, and system administration. This OJT course is 16 hours which includes 8 hours of study time and 8 hours of instructional time.

Prerequisites: 40420, 40426, 40434, 40435, 40436
And one of the following: None

45510 Orientation and Safety

Training Manager: AMA-450 Course Length: 36 hour(s)

This course provides training for technicians on orientation and safety. The course is 100% field-conducted training. Subjects include fire and personnel safety, emergency first aid, basic maintenance procedures, common facility records and forms, parts procurement, directives system, certification program, training and career development, and accident notification procedures.

Prerequisites: None
And one of the following: None

45515 Increasing NAS Knowledge (INK), FAA Order 6000.15

Training Manager: AMA-405 Course Length: 16 hour(s)

This course provides training for all AF personnel on the General Maintenance Handbook for Airway Facilities, FAA Order 6000.15. Subject areas include: general maintenance philosophy; organizational information; certification procedures (Tort law and litigation); maintenance requirements (technical documentation and logging practices); coordination requirements (periodic maintenance, scheduling, aircraft accident, and inspections); and protection of government property and personnel. The primary purpose is to increase NAS knowledge by covering topics in the general maintenance handbook for AF, which will provide employees with an understanding of their roles and responsibilities as define

Prerequisites: None
And one of the following: None

45516 Instructor Training (TTT) Increasing NAS Knowledge

Training Manager: AMA-405 Course Length: 80 hour(s)

This train-the-trainer course is for potential FAA Ink instructors who will be delivering this training at various field sites. The course consists of formal classroom instruction, workshop sessions, and practice teaching exercises. Content includes a complete overview of the teaching materials for the Ink course, instructor techniques for effective communications, facilitating discussions, using media, and how to use course lesson plans for effective training sessions. Emphasis is placed upon each student's effectiveness in performing the final practice teaching exercise, which will be critiqued by the instructors. Upon completion, instructors will be qualified to conduct course 45515.

Prerequisites: 44506
And one of the following: 10501, 10520

45518 Associate Certified Electronics Technician (AST)

Training Manager: AMA-405 Course Length: 2 hour(s)

This course number has been established to document satisfactory completion of the associate certified electronics technician (AST)

examination.

Prerequisites: None
And one of the following: None

46045   AN/GRN-29 ILS

Training Manager: AMA-405   Course Length: 216 hour(s)

This course is for personnel responsible for the organization and intermediate maintenance of the Solid-State Instrument Landing System II (SSILS II), AN/GRN-29(V).

Prerequisites: None
And one of the following: 40233, 40283

46048   Model 40 ARTS II Teletype-Tempest

Training Manager: AMA-405   Course Length: 160 hour(s)

This course provides training for technicians on the Model 40 Data Terminal. Subjects include application of teletypewriter transmission principles and signaling techniques, circuit and machine function characteristics, use of technical publications, equipment testing, troubleshooting, and maintenance procedures; use of maintenance tools and test equipment; and operation of a CPU, maintenance of CRT display monitor, printers, cassette drive storage units, and external interfacing.

Prerequisites: None
And one of the following: None

46049   Tempest Design Engineer

Training Manager: AMA-405   Course Length: 80 hour(s)

This course provides training for design and engineering personnel covering requirements of the NCA IM 5203. Subjects include methods for engineering systems to prevent negating the Tempest feature of any communication type equipment, and general Tempest information.

Prerequisites: None
And one of the following: None

46055   Mechanical Systems Electrical/Controls Troubleshooting

Training Manager: AMA-405   Course Length: 224 hour(s)

This course provides training for technicians on equipment employing Johnson, Minneapolis-Honeywell, Robert Shaw, Powers, or Barber-Coleman control systems. Subjects include operating procedures, servicing, inspection, calibration adjustment, and electrical troubleshooting.

Prerequisites: None
And one of the following: 40114, 47607, 40156

46060   AN/FRN-45 Tactical Air Navigation (TACAN)

Training Manager: AMA-405   Course Length: 152 hour(s)

This course provides training for technicians on AN/FRN-45 TACAN. Lectures and laboratory exercises cover functional TACAN/DME (Distance Measuring Equipment) operations; station block diagrams; analysis of digital computers, radio frequency amplifiers, transponders, monitors, power supplies, antennas, DME receivers, and control indicators (RCU); and system troubleshooting.

Prerequisites: 40276
And one of the following: None

46067   NEXRAD Dual Thread Delta Training

Training Manager: AMA-405   Course Length: 24 hour(s)

This adjunct course complements WSR-88D single channel training. The course covers FAA redundancy hardware design, software requirements, channel switch-over, and preventive maintenance. This hands-on training includes fault isolation, repair, and alignments.

Prerequisites: 46056
And one of the following: None

46068   NEXRAD System (WSR-88D)-NWS

Training Manager: AMA-405   Course Length: 264 hour(s)

This course provides training for technicians on the WSR88D Next Generation Weather Radar (NEXRAD) System. Lectures cover the functional analysis of the radar data acquisition (RDA), radar product generator (RPG), principle user processor (PUP), and communications subsystems. Laboratory sessions cover alignment, system performance analysis, and system fault analysis using software diagnosis. Students must complete NWS prerequisite package prior to class start.

Prerequisites: None
And one of the following: 40392, 42058, 88360

46069   NEXRAD Principle Users Processor (PUP) NWS

Training Manager: AMA-405   Course Length: 80 hour(s)

This course provides training for technicians on the PUP at the ARTCC associated with the NEXRAD WSR88D system. Subjects include analysis of the PUP and performance/fault analysis using software diagnostics.

Prerequisites: None
And one of the following: None

46071   Open Radar Product Generator (WSR-88D)

Training Manager: AMA-405   Course Length: 48 hour(s)

The course objective is to provide the skills required to perform operation and maintenance of the ORPG system. This includes familiarization with the Sun microsystems Ultra SPARC 5 & 10 workstations, Cisco switches and routers, APC UPS, and PTI communications server. Students will learn to 'boot up' the stations, sign on and initiate all software applications necessary for the proper operation of the system. The course will explain the interconnections of the system as well as the maintenance philosophy. Students will learn how to load all software on the systems and perform software backup tasks utilizing the available backup media. Fault isolation will be practiced along with configuration.

Prerequisites: 46068
And one of the following: None

46072   Radar Evaluation for Optimization

Training Manager: AMA-405   Course Length: 168 hour(s)

This course is for ATSS who are responsible for optimizing long-range radar systems. Test and evaluation principles of modern long-range surveillance systems including optimization and performance analysis, prefield activities, infield performance analysis and postfield debrief and quick look. Basic math includes scientific and engineering notation, logarithms, quadratic equations, pythagorean theorem, sine and cosine, hexadecimal numbering system, and constructing a DBM conversion chart. Basic radar includes concepts, elements of beacon, target position, radiation patterns, detection range, coverage prediction, and radiation hazards.

Prerequisites: None
And one of the following: 40383, 40388, 40398, 40399, 40408

46504   DOD - TSEC/KG-84(A)(C) Limited Maintenance

Training Manager: AMA-405   Course Length: 40 hour(s)

This course provides training for technicians on the KG-84 equipment to provide the national security agency certification. Subjects include identification and replacement of malfunctioning plug-in components, equipment operation checks, adjustments, COMSEC, Tempest, and safety.

Prerequisites: 44416
And one of the following: None

46505   FAA/Air Force Radar Replacement CI-13 Remote Rekey System

Training Manager: AMA-405   Course Length: 16 hour(s)

This course provides training for radar personnel responsible for maintenance of the Department of Defense (DOD) CI-13 Rekeying System. Subjects covered include purpose and function of the master control unit, remote control unit, ancillary equipment, system-level troubleshooting and restoring procedures, and individual equipment troubleshooting and restoring procedures.

Prerequisites: 40408
And one of the following: None

47001   (CBI) Troubleshooting Techniques

Training Manager: AMA-410   Course Length: 24 hour(s)

This course provides training for beginning technicians and engineers with less than 1 year of troubleshooting experience on any electronic/mechanical equipment. The course is 100% computer-based instruction (CBI). The course provides excellent generic examples of basic troubleshooting techniques. Technicians and engineers with more than 1 year of troubleshooting experience should only take this course if their troubleshooting skills need to be refreshed.

Prerequisites: None
And one of the following: None

47005   (CBI) National Airspace System

Training Manager: AMA-405   Course Length: 8 hour(s)

This course provides training to all personnel on the National Airspace System (NAS). The course is 100% computer-based instruction (CBI) with no exam. Subject areas include DOT organization, FAA organization, funding, regulation and certification, airports, airway facilities, flight service, terminal, en route, traffic management, weather, using the NAS, and the capital improvement plan (CIP).

Prerequisites: None
And one of the following: None

47008   (CBI) Second Generation VORTAC System Overview

Training Manager: AMA-420   Course Length: 20 hour(s)

This course provides training for technicians on the VOR/DME/TACAN, Type FA-9996. The course is 100% computer-based instruction (CBI). Subjects include purpose of VOR/TACAN, interface to NAS, block diagram analysis, location and function of VORTAC subsystems, assemblies, and subassemblies, RMM interface to RMC-F to AF work center.

Prerequisites: 40276
And one of the following: None

47011 (CBI) Solid State Radar Beacon Decoder (SSRBD)

Training Manager: AMA-440   Course Length: 16 hour(s)

This course provides training for technicians on the SSRBD equipment. The course is 100% computer-based instruction (CBI). Subjects include system concepts, control circuits, and line replaceable units.

Prerequisites: 44020
And one of the following: 40335, 47706, 45310, 40398, 44320

47012 (CBI) Introduction to Telecommunication

Training Manager: AMA-410   Course Length: 40 hour(s)

This course provides training for technicians and engineers on FAA-owned and vendor-provided telecommunication facilities and equipment. The course is 100% computer-based instruction (CBI). Subjects include central office operations, T1 transmission concepts, accessing networks, types of networks, transmission facilities, termination, line testing equipment, and future telecommunications. The course emphasizes industry terminology needed to communicate and coordinate with outside vendors.

Prerequisites: None
And one of the following: None

47014 (CBI) Digital Voice Recording System (DVRS)

Training Manager: AMA-410   Course Length: 24 hour(s)

This course provides training for technicians on the DVRS to the LRU level. The course is 9 hours correspondence study, 15 hours computer-based exercises (CBE's), and computer-based final exam. Subjects include overview and operation, system configuration, preventive and corrective maintenance procedures, diagnostic error codes, and use of program documentation.

Prerequisites: None
And one of the following: 44013, 44020

47015 (CBI) VTABS Database Operator

Training Manager: AMA-410   Course Length: 10 hour(s)

This course provides training on the VSCS Training and Backup System (VTABS), Type 10500, for ARTCC technicians, engineers, and SPS's; FAA Technical Center personnel; and air traffic control specialists (using air traffic course number). The course is 100% computer-based instruction (CBI). Subjects include system introduction, system overview, VTABS workstation, database management operations, system monitor and control subsystem. A VTABS CBI platform (provided by VSCS program office per implementation schedule) is required. Also required are VTABS system operations manuals and master instructor data entry operator/supervisor manuals.

Prerequisites: None
And one of the following: 40272, 40273, 48171, 48172

47016 (CBI) VTABS Master Instructor/Supervisor System Overview

Training Manager: AMA-410   Course Length: 13 hour(s)

This course provides training on the VSCS Training and Backup System (VTABS), Type 10500 for ARTCC technicians, engineers, and NAS managers; FAA Tech Center personnel; and air traffic supervisory personnel (using air traffic course number). The course is 100% computer-based instruction (CBI). Subjects include system introduction, system overview, VTABS workstation, cutover switch subsystem, system monitor and control subsystem. A VTABS CBI platform (provided by VSCS program office per implementation schedule) is required. Also required are VTABS system operations manuals and master instructor data entry operator/supervisor manuals.

Prerequisites: None
And one of the following: 40289, 49242

47018 (CBI) Recovery Communications System (RCOM) Operator

Training Manager: AMA-410   Course Length: 20 hour(s)

This course provides training for technicians and engineers who are Recovery Communications (RCOM) System operators. The course is 12 hours of self-study and 8 hours of computer-based instruction (CBI). Self study subjects include system purpose and function of system components. CBI subjects include system startup and shutdown, alarms/alerts, and system operation.

Prerequisites: None
And one of the following: None

47019 (CBI) Recovery Communications System (RCOM) Maintenance

Training Manager: AMA-410   Course Length: 40 hour(s)

This course provides training for technicians and engineers who will maintain the Recovery Communications (RCOM) System. The course is 24 hours of self-study and 16 hours of computer-based instruction (CBI). Self-study subjects include system purpose, function of system components, and fault isolation. CBI subjects include system startup and shutdown, alarms/alerts, system operation, and fault isolation procedures.

Prerequisites: None
And one of the following: None

47020 (CBI) Nexcom Multimode Digital Radio (Analog)

Training Manager: AMA-410 Course Length: 16 hour(s)

This course provides training for air traffic system specialists on the NEXCOM Multimode Digital Radio (MDR), analog mode. This course is 16 hours of computer-based instruction (CBI) self-study. The CBI and self-study include the installation, operation, maintenance, and troubleshooting of the NEXCOM MDR (analog) VHF transmitters, receivers, and cavity filters.

Prerequisites: None
And one of the following: None

47021 (CBI) Centralized Maintenance System (CMS) for RCE

Training Manager: AMA-410 Course Length: 24 hour(s)

This course provides training for technicians who will use and administer the Centralized Maintenance System (CMS) for radio control equipment (RCE) produced by CSTI. This course is 24 hours computer-based instruction. Subjects include hardware and software configuration, menus and windows, administration, addressing, network building, maintenance, and simulated exercises.

Prerequisites: 40034, 47506
And one of the following: None

47022 (CBI) VCSU Sytem Overview Delta

Training Manager: AMA-410 Course Length: 8 hour(s)

This course provides training for NAS managers for the VSCS control subsystem upgrade (VCSU) of the Voice Switching and Control System (VSCS). The course is 100% computer-based instruction. The scope of the subject matter is changes to the VSCS as a result of the VCSU implementation. Subjects include system architecture and workstation operations.

Prerequisites: None
And one of the following: 40289, 49242

47099 (CBI) Site Administrator Orientation

Training Manager: AMA-405 Course Length: 16 hour(s)

This course provides training for CBI site administrators. The course is 100% computer-based instruction (CBI). The course includes basic introductory lessons for first-time CYBER-based Instructional System (CYBIS) users. Subjects include management files and step-by-step procedures to maintain site CYBIS groups, student enrollment, ordering course materials, grade inspection, graded curriculums, ECC, RSITEA, writing notes, and obtaining graded exam passwords. No graded exams.

Prerequisites: None
And one of the following: None

47100 (CBI) Radar Remote Weather Display System (RRWDS) Digitizer

Training Manager: AMA-440 Course Length: 9 hour(s)

This course provides refresher/proficiency training for technicians and engineers on the RRWDS digitizer. The course is 100% computer-based instruction (CBI) with four modules. Subjects include preventive maintenance and troubleshooting procedures with three modules for monthly, quarterly, and semiannual preventive maintenance tasks. A fourth module checks proficiency in simulated troubleshooting with built-in test equipment (BITE) and modem tests and adjustments.

Prerequisites: None
And one of the following: 40379, 47302

47101 (CBI) RRWDS Processor Display

Training Manager: AMA-440 Course Length: 17 hour(s)

This course provides refresher/proficiency training for technicians and engineers on the Radar Remote Weather Display System (RRWDS) processor display. The course is 100% computer-based instruction (CBI) with four modules. Subjects include preventive maintenance and troubleshooting procedures with three modules that provide a refresher in monthly, quarterly, and semiannual preventive maintenance tasks. A fourth module checks proficiency in simulated troubleshooting with built-in test equipment (BITE) and modem tests and adjustments.

Prerequisites: None
And one of the following: 40380, 47304

47102 (CBI) Type I ICSS

Training Manager: AMA-410 Course Length: 12 hour(s)

This course provides refresher/proficiency training for technicians and engineers on the Model 400 Integrated Communications Switching System (ICSS), Type I. The course is 100% computer-based instruction (CBI). Subjects include functional analysis using system block diagrams, periodic maintenance using a simulator generated system and simulated test equipment, and corrective maintenance using a simulated malfunctioning Type I ICSS and simulated test equipment.

Prerequisites: 40023
And one of the following: None

47105 (CBI) Exide Uninterruptible Power Supply (UPS)

Training Manager: AMA-430   Course Length: 16 hour(s)

This course provides refresher/proficiency training for technicians on the Exide UPS. The course is 100% computer-based instruction (CBI). Subjects include a review of the Exide UPS, operating procedures, performance maintenance procedures, and trouble analysis procedures.

Prerequisites: 40149
And one of the following: None

47107   (CBI/MM) Precision Approach Path Indicator

Training Manager: AMA-430   Course Length: 30 hour(s)

This course provides training for technicians on the PAPI with RMS, Type FA-10265. This course also satisfies training required for the NBP PAPI/RMS, Type FA-10620. The course is 18 hours computer-based instruction (CBI) and 12 hours field-conducted lab. CBI and ATA subjects include PAPI configuration, PCA cabinet, IHA cabinet and components, aiming instrument set, and RMS. Lab subjects include PCA and IHA cabinets, lamps out, current adjustment, IHA alignments, RMS, and troubleshooting.

Prerequisites: None
And one of the following: 44111, 47600, 44117

47108   (CBI) Air Route Surveillance Radar (ARSR)-1/2 SSR/DMTI Sys

Training Manager: AMA-440   Course Length: 18 hour(s)

This course provides refresher/proficiency training for technicians on the ARSR-1/2 Solid-State Receiver (SSR)/Digital Moving Target Indicator (DMTI) System. The course is 100% computer-based instruction (CBI). Subjects include functional overview, preventive maintenance tasks, block-diagram overview, simulation of preventive maintenance, troubleshooting, and corrective maintenance adjustments, and practice to proficiency in simulated troubleshooting.

Prerequisites: 40383
And one of the following: None

47109   (CBI/MM) Remote Radio Control System (RRCS)

Training Manager: AMA-430   Course Length: 30 hour(s)

This course provides training for technicians on the New Bedford Panoramex RRCS, Type FA-10266. The course is 100% self-study text with computer-based exercises and computer-based final exam. Subjects include switch assembly cabinet, encoder interface unit, transmitter, receiver, decoder, and corrective maintenance.

Prerequisites: None
And one of the following: None

47110   (CBI) ERMS for MCC Specialists

Training Manager: AMA-430   Course Length: 4 hour(s)

This course provides training for MCC specialists on the Environmental Remote Monitoring Subsystem (ERMS) used by FAA to monitor environmental data at the FAA facilities where mandatory ERMS has been installed. The course is 100% CBI. Subjects include an ERMS overview, environmental monitoring overview, introduction to maintenance automation system software (MASS), introduction to direct monitor and control software (DMCS), and remote operation.

Prerequisites: 44423
And one of the following: None

47111   (CBI) ERME for Technicians

Training Manager: AMA-430   Course Length: 6 hour(s)

This course provides training for technicians on the Environmental Remote Monitoring Subsystem (ERMS) used by FAA to monitor environmental data at the FAA facilities where mandatory ERMS has been installed. The course is 100% CBI. Subjects include ERMS assemblies and subassemblies, installation and operation of opto software, configuration of the MDT, local site configuration and calibration, site verification, and troubleshooting remote operations.

Prerequisites: 44423
And one of the following: None

47112   (CBI) ARTCC Critical and Essential Power System (ACEPS)

Training Manager: AMA-430   Course Length: 24 hour(s)

This course provides training for airway facilities technicians, engineers, specialists, and Technical Center personnel on the ARTCC Critical and Essential Power System (ACEPS). This course is 24 hours computer-based instruction with an end-of-course examination. Subjects include equipment location, function, and operational characteristics.

Prerequisites: None
And one of the following: 44111, 44117

47202   (CBI) ARMS for ILS FA-10166

Training Manager: AMA-420   Course Length: 40 hour(s)

This course provides training for technicians and engineers on the Airport Remote Monitoring System (ARMS). The course is 100% computer-based instruction (CBI) with advanced training aids (ATA's). Subjects include periodic maintenance checks, alignment, fault diagnosis, use of input/output terminal for ILS monitoring system verification, and theory of operation. Practical exercises (ATA's) develop proficiency on the above topics. ATA's, general test equipment, and computer terminal are required to configure, troubleshoot, and repair the following subsystems: link control unit,

remote monitoring subsystem, and the battery charger pow er supply. ATA's are dow nloadable from the CD ROM.

Prerequisites: 44012
And one of the following: 44020, 44415

47203 (CBI) ARTS Operations for MCC Specialists

Training Manager: AMA-480 Course Length: 6 hour(s)

This course provides breadth training for NAS managers on the functional operational characteristics of the Automated Radar Terminal System (ARTS). The course is 100% computer-based instruction (CBI). Subjects include subsystem overview , basic terminology, and certification and reporting requirements.

Prerequisites: None
And one of the following: None

47204 (CBI) VORTAC/DME Operations for MCC Specialists

Training Manager: AMA-480 Course Length: 17 hour(s)

This course provides breadth training for NAS managers on the functional operational characteristics of the VORTAC/DME systems. The course is 100% computer-based instruction (CBI). Subjects include subsystem overview , RMM capabilities, diagnostic and restoration procedures, and certification and reporting requirements.

Prerequisites: None
And one of the following: None

47205 (CBI) ILS Operations for AF Control Ctr Specialists

Training Manager: AMA-480 Course Length: 12 hour(s)

This course provides breadth training for AF control center specialists on the functional operational charactersitics of instrument landing systems (ILS). The course is 100% computer-based instruction (CBI). Subjects include ILS subsystems, RMM capabilities, diagnostic and restoration procedures, and certification and reporting requirements.

Prerequisites: None
And one of the following: None

47206 (CBI) Communications Operations for MCC

Training Manager: AMA-480 Course Length: 16 hour(s)

This course provides breadth training for NAS managers on the functional operational characteristics of communications systems (VSCS, RCAG, BUEC, RCO, RTR, RCE, STVS). The course is 100% computer-based instruction (CBI). Subjects include the primary subsystems, RMM capabilities, diagnostic and restoration procedures,

and certification and reporting requirements.

Prerequisites: None
And one of the following: None

47207 (CBI) Radar Operations for MCC Specialists

Training Manager: AMA-480 Course Length: 52 hour(s)

This course provides breadth training for NAS operations managers/area specialists on the functional operational characteristics of the ASR, ARSR, ATCBI, Mode-S, ASDE, and TDWR radar systems. The course is 100% CBI. Subjects include primary radar subsystems, RMM capabilities unique to specific radar systems, diagnostic and restoration procedures, and certification reporting requirements. There are 9 exams. The first exam must be completed to receive credit. Students must enroll and complete the specific course for radar systems they are responsible for (see list). Additional courses should be based on monitoring and control responsibilities. (List: 47305/6/7/8/9/10/11 and 47208)

Prerequisites: None
And one of the following: None

47208 (CBI) Lighting Aids and Environmental Systems for MCC

Training Manager: AMA-480 Course Length: 6 hour(s)

This course provides breadth training for NAS managers on the functional and operational characteristics of the various lighting aids (MALSR, ALSF, VASI, PAPI, REILS, ODALS, LDIN) and environmental systems (PCSS, CCMS, and E/GS). The course is 100% computer-based instruction. Subjects include the primary subsystems, RMM capabilities, diagnostic and restoration procedures, and certification and reporting requirements.

Prerequisites: None
And one of the following: None

47210 (CBI) ILS Procedures

Training Manager: AMA-420 Course Length: 24 hour(s)

This course provides training for technicians and engineers w ho maintain the ILS. This course is 24 hours computer-based instruction. Subjects include general maintenance concepts, evolution of ILS maintenance, flight inspections and tolerances, periodic maintenance activities, reference flight inspection, periodic flight inspection, periodic-w ith-monitors flight inspection, and documenting reference and traceable parameters.

Prerequisites: None
And one of the following: 40233, 40283

47211 (CBI) ARSR-4 Operations for AFCC Specialists

Training Manager: AMA-480   Course Length: 12 hour(s)

This course provides training for AF technicians and engineers on the ARSR-4 System. The course is 100% computer-based instruction (CBI). Subjects include ARSR-4 subsystem overview, RMM capabilities, diagnostic and restoration procedures, and certification and reporting requirements.

Prerequisites: None
And one of the following: None

47212 (CBI) ILS Operations for AFCC Specialists

Training Manager: AMA-480   Course Length: 12 hour(s)

This course provides training for AF technicians and engineers on the functional operational characteristics of Instrument Landing Systems (ILS). The course is 100% computer-based instruction (CBI). Subjects include ILS subsystems, RMM capabilities, diagnostic and restoration procedures, and certification and reporting requirements.

Prerequisites: None
And one of the following: None

47213 (CBI) VORTAC Operations for AFCC Specialists

Training Manager: AMA-480   Course Length: 17 hour(s)

This course provides training for technicians and engineers on the VORTAC System. The course is 100% computer-based instruction (CBI). Subjects include subsystem overview, RMM capabilities, diagnostic and restoration procedures, and certification and reporting requirements.

Prerequisites: None
And one of the following: None

47302 (CBI) RRWDS-Digitizer

Training Manager: AMA-440   Course Length: 24 hour(s)

This course provides training for technicians, engineers, and developmental technicians on the Radar Remote Weather Display System (RRWDS) digitizer, Type FAA-9901/1/2/3. The course is 100% computer-based instruction (CBI) with advanced training aids (ATA's), and a supervised final. CBI subjects include the radar interface, video processing, communication system, and built-in test equipment. The ATA's include operation, routine maintenance, adjustments, and troubleshooting.

Prerequisites: None
And one of the following: 40392, 42058, 88360

47304 (CBI) RRWDS-Processor/Display

Training Manager: AMA-440   Course Length: 40 hour(s)

This course provides training for technicians, engineers, and developmental technicians on the Radar Remote Weather Display System (RRWDS) processor/display, Type FAA-9901/6/7. The course is 100% computer-based instruction (CBI) with advanced training aids (ATA's). CBI subjects include the processing unit, refresh-memory system, color generator, character generator, sweep deflection, and convergence. The ATA's include operation, routine maintenance, adjustments, and troubleshooting.

Prerequisites: None
And one of the following: 40392, 42058, 88360

47305 (CBI) Weather Radar Exam for MCC Specialists

Training Manager: AMA-480   Course Length: 1 hour(s)

This exam is based upon the information provided in Course 47207, (CBI) Radar Operations for MCC Specialists. This exam consists of five questions which cover the NEXRAD and TDWR subsystems, monitoring, commands, cautions, and restrictions.

Prerequisites: 47207
And one of the following: None

47306 (CBI) Radar Equip. (ASR-4/5/6/7/8/9 & ASDE-3) Exam for MCC

Training Manager: AMA-480   Course Length: 1 hour(s)

This exam is based upon the information provided in Course 47207, (CBI) Radar Operations for MCC Specialists. This exam consists of five questions which cover the ASR-4/5/6/7/8/9 and ASDE-3 subsystems, monitoring, commands, certification, procedures, and cautions and restrictions.

Prerequisites: 47207
And one of the following: None

47307 (CBI) ARSR-3 Exam for MCC Specialists

Training Manager: AMA-480   Course Length: 1 hour(s)

This exam is based upon the information provided in Course 47207, (CBI) Radar Operations for MCC Specialists. This exam consists of five questions which cover the ARSR-3 subsystems, monitoring, commands, cautions, and restrictions.

Prerequisites: 47207
And one of the following: None

47308 (CBI) Mode-S Exam for MCC Specialists

Training Manager: AMA-480   Course Length: 1 hour(s)

This exam is based upon the information provided in Course 47207, (CBI) Radar Operations for MCC Specialists. This exam consists of five questions that cover the Mode-S Subsystems, monitoring, commands, diagnosis, cautions, and restrictions.

Prerequisites: **47207**
And one of the following: None

47309 (CBI) Beacon Equipment (ATCBI-3/4/5) Exam for MCC

Training Manager: AMA-480   Course Length: 1 hour(s)

This exam is based upon the information provided in Course 47207, (CBI) Radar Operations for MCC Specialists. This exam consists of five questions which cover the ATCBI-3/4/5 subsystems, monitoring, commands, and cautions and restrictions.

Prerequisites: **47207**
And one of the following: None

47310 (CBI) ARSR-4 Exam for MCC Specialists

Training Manager: AMA-480   Course Length: 1 hour(s)

This exam is based upon the information provided in Course 47207, (CBI) Radar Operations for MCC Specialists. This exam consists of five questions which cover the ARSR-4 subsystems, monitoring, commands, and cautions and restrictions.

Prerequisites: **47207**
And one of the following: None

47311 (CBI) ARSR 1/2 Exam for MCC Specialists

Training Manager: AMA-480   Course Length: 1 hour(s)

This exam is based upon the information provided in Course 47207, (CBI) Radar Operations for MCC Specialists. This exam consists of five questions which cover the ARSR-1/2 subsystems, monitoring, commands, and cautions and restrictions.

Prerequisites: **47207**
And one of the following: None

47312 (CBI) FPS Radar Exam for MCC Specialists

Training Manager: AMA-480   Course Length: 1 hour(s)

This exam is based upon the information provided in Course 47207, (CBI) Radar Operations for MCC Specialists. This exam consists of five questions which cover FPS subsystems, monitoring, commands, and cautions and restrictions.

Prerequisites: **47207**
And one of the following: None

47313 (CBI) Beacon Only Site RMMS (BOS RMMS)

Training Manager: AMA-440   Course Length: 40 hour(s)

This course provides training for technicians and engineers on the Beacon Only Site Remote Maintenance Monitoring System (BOS RMMS). This course is 100% computer-based instruction (CBI). Subjects include system overview, theory of operation, operating procedures, corrective and preventive maintenance procedures, and in-depth troubleshooting analysis.

Prerequisites: **44323, 47706**
And one of the following: None

47314 (CBI) Berms Hardware

Training Manager: AMA-440   Course Length: 40 hour(s)

This course provides training for technicians on the BERMS, an additional system for ARSR-4 sites. The course is 100% computer-based instruction (CBI). Subjects include system operation, preventive maintenance, corrective maintenance system analysis, and system restoration. students who have completed Course 40408, 47706, or 44323 must take BERMS as a stand-alone CBI course.

Prerequisites: None
And one of the following: 40408, 47706, 47313, 44323

47315 (CBI) STARS Technical On-Site Representatives (TOR)

Training Manager: AMA-405   Course Length: 12 hour(s)

This course provides training for ani personnel on the STARS system, the roles and responsibilities of the technical on-site representative (TOR), FAA order 6030.45A, contractor acceptance inspection, and joint acceptance inspection.

Prerequisites: None
And one of the following: None

47316 (CBI) Introduction to Windows NT

Training Manager: AMA-460   Course Length: 20 hour(s)

This course provides training for technicians, engineers, computer operators, and developmental technicians on the use of the Windows NT operating system set up on a 486dx2/66 Mhz computer with mouse, 16Mb RAM, 2xcd-ROM, monitor with 256 colors, 640x480 resolution (800x600 recommended), and optional sound card with speakers or headphones. The course is 100% computer-based

instruction (CBI). Subjects include Windows NT overview; managing accounts and groups; files, printing, and networking interoperability; Windows NT server administration; and troubleshooting, optimization, and maintenance. Students are required to complete disk one (1) only.

Prerequisites: None
And one of the following: None

47401   (CBI/MM) Tower Data Link Services (TDLS)

Training Manager: AMA-480 Course Length: 8 hour(s)

This course provides training for technicians and engineers on the TDLS automation equipment. The course is 7 hours correspondence study and 1 hour computer-based exercises with a supervised final. Correspondence study subjects include description, function, distribution, facility/class code and staffing standards, certification requirements, TDLS operations, maintenance, troubleshooting, and restoration to operational status. This course is for localities that still have legacy TDLS Systems installed. Course 40422 is for localities currently installing the new TDLS Aystem.

Prerequisites: None
And one of the following: None

47406   (CBI) Codex/Motorola 9800 NMS

Training Manager: AMA-470 Course Length: 40 hour(s)

This course provides training for technicians, engineers, and system performance specialists on the Codex/Motorola 9800 NMS. The course is 100% computer-based instruction (CBI). Subjects include building a data multiplexing network, operating the network, and maintaining the network.

Prerequisites: 47411
And one of the following: None

47407   (CBI) Type I/II Statistical Multiplexer Maintenance

Training Manager: AMA-470 Course Length: 40 hour(s)

This course provides training for technicians on the statistical multiplexers, Types DCX 808, DCX 816, DCX 832, and DCX 844. The course is 100% CBI. Subjects include: initializing and accessing DCX devices; utilizing controls, menus and indicators; configuring channel and ARQ-link parameters; monitoring DCX devices; and performing diagnostic testing and fault isolation procedures.

Prerequisites: None
And one of the following: None

47408   (CBI) Type III Statistical Multiplexer Maintenance

Training Manager: AMA-470 Course Length: 40 hour(s)

This course provides training for technicians on the statistical multiplexers, type DCX 840 and DCX 850. The course is 100% CBI. Subjects include determining location and function of all cards and subassemblies; strapping and configuring DCX cards; constructing device and channel maps; configuring the USO, NCAM, and monitor cards to operate the DCX 850; and performing diagnostic testing and fault isolation procedures.

Prerequisites: 47407
And one of the following: None

47410   (CBI) HID/NAS/LAN E-Com Monitor

Training Manager: AMA-480 Course Length: 3 hour(s)

This course provides training for technicians and NAS managers on the Host Interface Device/National Airspace System/Local Area Network (HID/NAS/LAN) E-com monitor. The course is 100% computer-based instruction. Subjects include components of the HID/NAS/LAN system, system data flow, and use of the E-com monitor to view and change Netview configurations.

Prerequisites: None
And one of the following: None

47411   (CBI) Data Telecommunications for ARTCC's

Training Manager: AMA-470 Course Length: 56 hour(s)

This course provides training for technicians on the Codex 6250 DNM, 2185 bridge, and Codex 3600 modem. The course is 100% computer-based instruction (CBI). Subjects include general theory, Codex 3600 modem operation, Codex 6250 digital network multiplexer, Olektron A/B switch, and Olektron clock box.

Prerequisites: None
And one of the following: None

47412   (CBI) Data Telecommunications for Remote Sites

Training Manager: AMA-470 Course Length: 40 hour(s)

This course provides training for technicians on the Codex 3600 modem and 2185 digital bridge. The course is 100% computer-based instruction (CBI). Subjects include general communications theory, 3600 Codex modem operation, and 2185 digital bridge operation.

Prerequisites: None
And one of the following: None

47413   (CBI) Data Telecommunications for Long Range Radar

Training Manager: AMA-470   Course Length: 40 hour(s)

This course provides training for technicians on the Codex 3600 modem, 2185 digital bridge, and clock box. The course is 100% computer-based instruction (CBI). Subjects include general communications theory, 3600 Codex modem operation, 2185 digital bridge operation, and clock box operation and maintenance.

Prerequisites: None
And one of the following: None

47414   (CBI) Data Telecommunications for Large Remote Sites

Training Manager: AMA-470   Course Length: 40 hour(s)

This course provides training for technicians on the Codex 3600 modem, 2185 bridge, and A/B switch. The course is 100% computer-based instruction (CBI). Subjects include general communications theory, Hadex 4000 patch panel, Codex 3600 operation, and Olektron A/B switch operation and maintenance.

Prerequisites: None
And one of the following: None

47415   (CBI) Traffic Flow Management Infrastructure (TFMI)

Training Manager: AMA-470   Course Length: 40 hour(s)

This course provides training for technicians, engineers, and FAA Technical Center personnel on ETMS Model HP-C360 equipment. The course is 20 hours self-study text with 20 hours computer-based exercises (CBE). Self-study subjects include system overview, workstation user environment, UNIX, monitor, keyboard, trackball, tape drive, troubleshooting, and fault isolation procedures. CBE subjects include login, files and directories, basic commands, HP tools, workstation/file-server basics, addresses, diagnostic commands, troubleshooting, and fault isolation.

Prerequisites: None
And one of the following: None

47418   (CBI/MM) HOCSR System Architecture for Computer Operators

Training Manager: AMA-470   Course Length: 10 hour(s)

This course provides training for computer operators on the new IBM Model 9672 (G3) Mainframe System 390 architecture for the NAS. Course is 5.5 hours self-study text and 2.5 hours computer-based exercises (CBE) with a supervised open-book final exam (2 hours). The course covers operational changes to NAS due to Phase II of the HOST Oceanic Computer System Replacement (HOCSR) program. Subjects include changes to the documentation; software system overview; new, modified, and deleted monitor four-letter messages; and solicited/unsolicited output messages.

Prerequisites: 40420
And one of the following: None

47419   (CBI/MM) HOCSR System Architecture for Hardware Technicians

Training Manager: AMA-470   Course Length: 10 hour(s)

This course provides training for technicians on the new IBM Model 9672 (G3) Mainframe System 390 architecture for the NAS. Course is 5.5 hours self-study text and 2.5 hours computer-based exercises (CBE) with supervised open-book final exam (2 hours). The course covers operational changes to NAS due to Phase II of the HOST Oceanic Computer System Replacement (HOCSR) program. Subjects include changes to the documentation; software system overview; hardware system overview; new, modified, and deleted monitor four-letter messages; and solicited/unsolicited output messages.

Prerequisites: 40426
And one of the following: None

47420   (CBI/MM) HOCSR System Architecture for System Specialists

Training Manager: AMA-470   Course Length: 16 hour(s)

This course provides training for system specialists on the new IBM Model 9672 (G3) Mainframe System 390 architecture for the NAS. The course is 10.5 hours self-study text and 3.5 hours computer-based exercises (CBE) with a supervised open-book final exam (2 hours). The course covers operational changes to NAS due to Phase II of the HOST Oceanic Computer System Replacement (HOCSR) program. Subjects include changes to the documentation; software system overview; hardware system overvie; new, modified, and deleted monitor four-letter messages; and solicited/unsolicited output messages; ACES; compool tables; and Deltas between System 370 and 390 architecture and instruction sets.

Prerequisites: 40420, 43021
And one of the following: None

47421   (CBI/MM) HOCSR System Architecture for NAS/NOM

Training Manager: AMA-470   Course Length: 14 hour(s)

This course provides training for NAS managers on the new IBM Model 9672 (G3) Mainframe System 390 architecture for the NAS. Course is 8.5 hours self-study text and 3.5 hours computer-based exercises (CBE's) with supervised open-book final exam (2 hours). The course covers operational changes to NAS due to Phase II of the HOST Oceanic Computer System Replacement (HOCSR) program. Subjects include changes to the documentation; software system overview; hardware system overview; new, modified, and deleted monitor four-letter messages; and solicited/unsolicited output messages; ACES; and compool tables.

Prerequisites: 40420
And one of the following: 43040, 43014, 43535

47422 (CBI) Teledyne RVR for MCC Specialists

Training Manager: AMA-480 Course Length: 5 hour(s)

This course provides training for MCC specialists on the Runway Visual Range (RVR) Teledyne Model 10628. The course is 100% computer-based instruction. Subjects include RVR principles, RVR subsystem components, monitoring and interactions, and activities necessary to manage RVR alarms.

Prerequisites: None
And one of the following: None

47423 (CBI/MM) Oceanic S/390 Architecture for Software Specialists

Training Manager: AMA-470 Course Length: 14 hour(s)

This course provides training for oceanic systems specialists and Technical Center personnel on the IBM Model 9672 (G3) Mainframe System 390 architecture for the NAS. The course is 9 hours self-study text and 3 hours computer-based exercises (CBE) with a 2-hour supervised open-book CBI final exam. The course covers operational changes to the Oceanic System due to Phase II of the HOCSR program. Subjects include changes to the documentation; H/W and S/W system overview; new, modified, and deleted monitor four-letter messages; solicited/unsolicited output messages; ACES records; compool tables; and support software Deltas between Phase II enroute and Phase II Oceanic Systems.

Prerequisites: 48309, 47420
And one of the following: None

47424 (CBI/MM) Oceanic S/390 Architecture for System Operations

Training Manager: AMA-470 Course Length: 10 hour(s)

This course provdies training for Oceanic System NAS/NOMS, hardware technicians, and computer operators on the IBM Model 9672 (G3) Mainframe System 390 architecture for the NAS. The course is 6 hours self-study text and 2 hours computer-based exercises (CBE) with a 2-hour supervised open-book CBI final exam. The course covers operational changes to the Oceanic System due to Phase II of the hocsr program. Subjects include changes to the documentation; hardware and software system overview; new, modified, and deleted monitor four-letter messages; solicited/unsolicited output messages; and support software Deltas between Phase II en route and Phase II oceanic systems.

Prerequisites: 48310
And one of the following: 47418, 47419, 47421

47425 (CBI) CTAS Remote Site Maintenance

Training Manager: AMA-480 Course Length: 8 hour(s)

This course provides training for technicians and engineers who remotely maintain the Center Tracon Automation System (CTAS). The course is 8 hours computer-based instruction (CBI). Subjects include CTAS configuration, operation, and monitoring, remote system access, monitoring the Traffic Management Advisor (TMA) System remotely, remote fault isolation, and periodic system maintenaance.

Prerequisites: None
And one of the following: None

47426 (CBI) Teledyne RVR Remote Operations for AF Specialists

Training Manager: AMA-480 Course Length: 3 hour(s)

This course provides training for field specialists on the Runway Visual Range (RVR) Teledyne Model 10628 remote operations. The course is 100% computer-based instruction. Subjects include RVR monitoring and interaction via the MCF and activities necessary to manage RVR alarms.

Prerequisites: 44423
And one of the following: 40279, 45019, 48179

47427 (CBI/MM) CTAS Monitor and Control

Training Manager: AMA-480 Course Length: 6 hour(s)

This course is for airway facilities specialists who monitor and control the Center TRACON Automation system (CTAS). This course is 6 hours of computer-based instruction (CBI) with an end-of- course examination. Subjects include basic and advanced system monitoring and control basic solaris UNIX, fault isolation, system software maintenance, auxilliary equipment maintenance, and system security.

Prerequisites: None
And one of the following: None

47428 (CBI/MM) CTAS Maintenance

Training Manager: AMA-480 Course Length: 8 hour(s)

This course is for airway facilities specialists who maintain the Center Tracon Automation System (CTAS). This course is 8 hours computer-based instruction (CBI) with an end-of-course examination. Subjects include basic and advanced system monitoring and control, basic solaris UNIX, fault isolation, system software maintenance, auxiliary equipment maintenance, and system security.

Prerequisites: None
And one of the following: None

47429   (CBI) Weather Radar Systems Operations for AFCC Specialists

Training Manager: AMA-480   Course Length: 24 hour(s)

This course provides information for the AFCC specialist who is responsible for weather radar systems operation. This course is 24 hours computer-based instruction. Subjects include TDWR and NEXRAD equipment status/availability, TDWR and NEXRAD periodic maintenance, control of the TDWR and NEXRAD (reconfigure, reset, restore, etc.), TDWR and NEXRAD IMCS/MASS screen navigation and interpretation, and given data points and commands, students will relate the TDWR and NEXRAD system block diagram to the IMCS/MASS.

Prerequisites: 47207
And one of the following: None

47430   (CBI) Term Serveillance RDR Sys OPS for AFCC Specialists

Training Manager: AMA-480   Course Length: 24 hour(s)

This course provides information for the AFCC specialist who is responsible for terminal surveillance radar systems operation. This course is 24 hours computer-based instruction. Subjects include ASR-7/8/9 equipment status/availability, ASR-7/8/9 periodic maintenance, control of the ASR-7/8/9 (reconfigure, reset, restore, etc.), ASR-7/8/9 IMCS/MASS screen navigation and interpretation, andgiven data points and commands, students will relate the ASR-7/8/9 system block diagram to the IMCS/MASS.

Prerequisites: 47207
And one of the following: None

47431   (CBI) Mode-S Operations for AFCC Specialists

Training Manager: AMA-480   Course Length: 24 hour(s)

This course provides information for the AFCC specialist who is responsible for Mode-S operations. This course is 24 hours computer-based instruction. Subjects include Mode-S equipment status/availability, Mode-S periodic maintenance, control of the Mode-S (reconfigure, reset, restore, etc.), Mode-S IMCS/MASS screen navigation and interpretation, and given data points and commands, students will relate the Mode-S system block diagram to the IMCS/MASS.

Prerequisites: 47207
And one of the following: None

47432   (CBI) ATCBI Operations for Afcc Specialists

Training Manager: AMA-480   Course Length: 24 hour(s)

This course provides information for the AFCC specialist who is responsible for ATCBI-4/5/6, Radar Beacon ISM, and BERMS operations. This course is 24 hours computer-based instruction.

Subjects include ATCBI-4/5/6, Radar Beacon ISM, and BERMS equipment status/availability, ATCBI-4/5/6, Radar Beacon ISM, and BERMS periodic maintenance, control of the ATCBI-4/5/6, Radar Beacon ISM, and BERMS (reconfigure, reset, restore, etc.), ATCBI-4/5/6, Radar Beacon ISM, and Berms IMCS/MASS screen navigation and interpretation, and given data points and commands, students will relate the ATCBI-4/5/6, Radar Beacon ISM, and Berms system block diagrams to the IMCS/MASS.

Prerequisites: 47207
And one of the following: None

47433   (CBI) ARSR-3 Operations for AFCC Specialists

Training Manager: AMA-480   Course Length: 24 hour(s)

This course provides information for the AFCc specialist who is responsible for ARSR-3 operations. This course is 24 hours computer-based instruction. Subjects include ARSR-3 equipment status/availability, ARSR-3 periodic maintenance, control of the ARSR-3 (reconfigure, reset, restore, etc.), ARSR-3 IMCS/MASS screen navigation and interpretation, and given data points and commands, students will relate the ARSR-3 system block diagram to the IMCS/MASS.

Prerequisites: 47207
And one of the following: None

47434   (CBI) ARSR 1/2 Operations for AFCC Specialists

Training Manager: AMA-480   Course Length: 24 hour(s)

This course provides information for the afcc specialist who is responsible for ARSR 1/2 operations. This course is 24 hours computer-based instruction. Subjects include ARSR 1/2 equipment status/availability, ARSR 1/2 periodic maintenance, control of the ARSR 1/2 (reconfigure, reset, restore, etc.), ARSR 1/2 IMCS/MASS screen navigation and interpretation, and given data points and commands, students will relate the ARSR 1/2 system block diagram to the IMCS/MASS.

Prerequisites: 47207
And one of the following: None

47435   (CBI) FPS Operations for AFCC Specialists

Training Manager: AMA-480   Course Length: 24 hour(s)

This course provides information for the AFCC specialist who is responsible for FPS operations. This course is 24 hours computer-based instruction. Subjects include FPS equipment status/availability, FPS periodic maintenance, control of the FPS (reconfigure, reset, restore, etc.), FPS IMCS/MASS screen navigation and interpretation, and given data points and commands, students will relate the FPS system block diagram to the IMCS/MASS.

Prerequisites: 47207
And one of the following: None

47436 (CBI) NIMS VORTAC Operations for AFCC Specialists

Training Manager: AMA-480 Course Length: 20 hour(s)

This course provides information for the AFCC specialist who is responsible for NIMS VORTAC operations. This course is 20 hours computer-based instruction. Subjects include how to determine VORTAC equipment status/availability, performing VORTAC periodic maintenance, controlling the VORTAC, (reconfigure, reset, restore, etc.), navigating/interpreting VORTAC NIMS/Tivoli screens, and relating a VORTAC system block diagram to the NIMS, provided data points, and commands.

Prerequisites: 48363
And one of the following: None

47500 (CBI) Back-Up Emergency Communications (BUEC) Remote-Site

Training Manager: AMA-410 Course Length: 64 hour(s)

This course provides training for technicians on BUEC Transceivers and Control Systems, Types FA-8190 and FA-8191. The course is 56 hours computer-based instruction (CBI) and 8 hours of field-conducted on-the-job training (OJT). CBI subjects include introduction, control equipment, BUEC transmitter, and BUEC receiver. OJT subjects include coordination of maintenance activities with ATC, BUEC transmitter alignment and performance checks, and BUEC receiver alignment and performance checks.

Prerequisites: None
And one of the following: None

47501 (CBI) Back-Up Emergency Communications-ARTCC

Training Manager: AMA-410 Course Length: 40 hour(s)

This course provides training for technicians on the BUEC Transmitter and Receiver, Remote Control Group, Types FA-8190, FA-8191, FA-8192, FA-8193, and FA-8194. The course is 32 hours of computer-based instruction (CBI) and 8 hours of field-conducted on-the-job training (OJT). CBI subjects include introduction, control equipment, BUEC transmitter, BUEC receiver, and remote control group. OJT subjects include coordination of maintenance activities with ATC, select command and transmitter keying checks, power supplies check, transmit audio and audio keying level adjustments, maintenance panel operation, and remote link tester.

Prerequisites: None
And one of the following: None

47504 (CBI/MM) Communication Equipment

Training Manager: AMA-410 Course Length: 144 hour(s)

This course provides training for technicians on communications equipment (CE). This course is 80 hours of computer-based instruction (CBI), self-study and 64 hours Academy lab. CBI and self-study include theory of operation of Solid-State VHF and UHF transmitters, receivers, audio, control lines, tone channeling equipment, logs, and decibels. Six blocks of instruction cover 25 modules. Lab includes communications, test equipment, electromagnetic spectrum, antenna characteristics, AM and FM signals, receiver principles, transmitter principles, telephony, radio control equipment, AN/GRR-23/24, AN/GRT-21/22, PET 2000, and Motorola CM-200.

Prerequisites: None
And one of the following: None

47506 (CBI) Radio Control Equipment (RCE) Hardware Maintenance

Training Manager: AMA-410 Course Length: 40 hour(s)

This course provides training for technicians, engineers, specialists, and FAA Technical Center personnel who will operate the radio control equipment (RCE). This course is 16 hours computer-based instruction (CBI) and 24 hours Academy lab. CBI subjects include system purpose, system components, and use of the maintenance data terminal (MDT) to communicate with and control the RCE. Laboratory subjects include troubleshooting exercises with three exercises used as the end-of-lab evaluation.

Prerequisites: 47504
And one of the following: None

47507 (CBI/MM) Small Tower Voice Switch (STVS)

Training Manager: AMA-410 Course Length: 48 hour(s)

This course provides training for AF technicians on the small tower voice switch (STVS). This course is 24 hours computer-based instruction (CBI) and 24 hours Academy laboratory. CBI subjects include system description, purpose of each LRU, STVS reconfiguration and mapping, and audio level checks/alignments. Laboratory subjects include operation of position modules, audio level checks, system alignments, system configuration, and troubleshooting.

Prerequisites: 47504
And one of the following: None

47606 (CBI) Visual Approach Slope Indicator

Training Manager: AMA-430 Course Length: 64 hour(s)

This course provides training for technicians and engineers on VASI West Tech FA-9330, DISAN FA-9873, SEPCO FA-9458, SEPCO FA-

9458B, West Tech FA-9458A, and LO1-1A Brightness Control Regulator. The course is 56 hours computer-based instruction (CBI) and 8 hours field-conducted lab with a supervised final exam. CBI subjects (192 lessons and seven advanced training aids) cover operational characteristics, assemblies, subassemblies, performance checks, maintenance, alignment, adjustment, and troubleshooting procedures. Field-conducted lab is conducted on the equipment at the field facility.

Prerequisites: None
And one of the following: 44111, 47600, 44117

47608   (CBI) Engine Generator Power Systems

Training Manager: AMA-430   Course Length: 280 hour(s)

This course provides training for technicians and engineers on engine generators, control panels, and automatic transfer switches. The course is 120 hours CBI and 160 hours Academy laboratory. CBI subjects include mechanical, electrical, and electronic theory of engine generator systems (to include Kohler engines) and ASCO/Kohler transfer switches. Laboratory subjects include mechanical maintenance and repair of engines (to include Kohler), electrical/electronic maintenance and repair of automatic transfer switches, and troubleshooting mechanical and electrical systems. Only for personnel with no previous engine generator training.

Prerequisites: None
And one of the following: 44111, 44117, 47600

47610   (CBI) Power Distribution Systems

Training Manager: AMA-430   Course Length: 200 hour(s)

This course provides training for technicians and engineers on cable fault analysis, lightning protection, grounding, bonding, shielding, and facility electrical inspections. The course is 80 hours computer-based instruction (CBI) and 120 hours Academy laboratory. CBI subjects include cable maintenance, faults, and splicing; earth electrode, power grounding, and electronic signal ground systems; bonding, shielding, and electrical inspection techniques for raceway systems; conductors, wiring devices, service equipment, panel boards, motors and controls; lamps and lighting fixtures; and emergency systems. The laboratory sessions apply techniques covered in the CBI portion of the course.

Prerequisites: None
And one of the following: 44111, 47600, 44117

47700   (CBI) Distance Measuring Equipment (DME), FA-9783

Training Manager: AMA-420   Course Length: 96 hour(s)

This course provides training for technicians on the Cardion 3 DME Equipment, Type FA-9783. The course is 56 hours CBI and 40 hours Academy laboratory (hands on equipment). CBI subjects include DME

introduction and theory for the power distribution system; transponder; monitor, control and transfer; remote monitoring equipment; and system analysis (troubleshooting). Laboratory subjects include review of DME preventive maintenance using FAA Maintenance Order 6730.2, and alignments and corrective maintenance using TI 6780.4, The Manufacturer's Instruction Book.

Prerequisites: 44020
And one of the following: 40276, 44215, 40284

47701   (CBI) Second Generation VORTAC Hardware

Training Manager: AMA-420   Course Length: 208 hour(s)

This course provides training for technicians on the VORTAC and RTA-2 antenna speed control equipment. The course is 152 hours CYBIS/CBI and 56 hours Academy lab. CYBIS/CBI subjects include introduction of VORTAC and IOT screens and theory for power subsystem; VOR transmitter, goniometer, monitor and ground check; TACAN transponder, power amplifier, monitor and power supply; RTA-2 antenna speed-control unit, FCPU, and RMC-F. Lab subjects include preventive maintenance procedures from FAA maintenance order 6820.7b, and alignments and corrective maintenance procedures from TI 6780.4, Manufacturer's Instruction Book. CBI lessons as well as CYBIS lessons are required for course completion.

Prerequisites: 44020
And one of the following: 40276, 40284

47702   (CBI) Localizer - Mark 1 D/E/F

Training Manager: AMA-420   Course Length: 152 hour(s)

This course provides training for technicians on the Instrument Landing System, Wilcox Mark 1 D/E/F. The course is 104 hours CBI and 48 hours Academy laboratory. CBI subjects include block diagram and circuit diagram for all units and circuit cards. Videotape subjects include demonstrations of performance tasks. Laboratory subjects include alignment and calibration of localizer to current standards. Some lab procedures are outdoors--bring proper clothing for weather. Requires current versions of ILS maintenance order, general maintenance order, and TI. TPMO must provide models (D/E/F) for proper registration and enrollment. This course includes an Academy lab examination.

Prerequisites: None
And one of the following: 40233, 88220, 40283, 88257

47703   (CBI) Glideslope (Short) - Mark 1 D/E/F

Training Manager: AMA-420   Course Length: 64 hour(s)

This course provides training for technicians on the Instrument Landing System, Wilcox Mark 1 D/E/F glideslope. The course is 32 hours CBI and 32 hours Academy laboratory. CBI subjects include block diagrams and circuit diagrams for units and circuit cards. Laboratory subjects include alignment and calibration of glideslope to

current standards. Must complete 47702 before attending this course. This segment only teaches the difference between LOC and GS units. Requires current versions of ILS, general, and battery maintenance orders, and TI. TPMO must provide models D/E/F for proper registration. This course includes an Academy lab examination.

Prerequisites: 40283
And one of the following: 47702, 88234

47704   (CBI) Mark 1 D/E/F Remote Monitor/Land Lines

Training Manager: AMA-420   Course Length: 24 hour(s)

This course provides training for technicians on the Instrument Landing System, Wilcox landline Remote monitor, and VHF RXR monitor units. the course is 16 hours CBI and 8 hours academy laboratory. CBI subjects include block and schematic diagrams of units and circuit cards. Laboratory subjects include alignment and calibration to current standards. Knowledge of basic VHF receivers is required. Requires current versions of ILS maintenance order, general maintentance order, and TI. This course includes an Academy lab examination.

Prerequisites: 40283
And one of the following: 47702, 88234

47705   (CBI) Mark 1D/E ILS Marker Beacon

Training Manager: AMA-420   Course Length: 32 hour(s)

This course provides training for technicians on the Instrument Landing System, Wilcox Marker Beacon. The course is 24 hours CBI and 8 hours academy laboratory. CBI subjects include block and schematic diagrams for all units and circuit cards. Laboratory subjects include alignment and calibration of beacon to current standards. Requires current versions of ILS, general, and battery maintenance orders, and TI. The tpmo must provide models d/e/f for proper registration and enrollment. This course includes an Academy lab examination.

Prerequisites: 40283
And one of the following: 47702, 88234

47706   (CBI) ATC Beacon Indicator (ATCBI-5) Trans/Receiver Site

Training Manager: AMA-440   Course Length: 96 hour(s)

This course provides training for technicians on the Air Traffic Control Beacon Interrogator (ATCBI)-5. The course is 56 hours computer-based instruction (CBI) and 40 hours laboratory. The lab portion can be taken in the field as OJT or resident lab at the Academy. CBI and advanced training aids (ATA's) subjects include system concepts, pulse-mode generator, transmitter, receiver, stagger/destagger, side-lobe suppression and improved side-lobe suppression (SLS/ISLS),

monitors, control circuits, and beacon test sets. Laboratory subjects include periodic maintenance and corrective maintenance tasks, system troubleshooting, and system performance checks.

Prerequisites: None
And one of the following: 40392, 42058, 88360

47708   (CBI) Capture Effect Glideslope (CEG)

Training Manager: AMA-420   Course Length: 72 hour(s)

This course provides training for technicians on a capture effect glideslope (CEG) facility (not equipment-specific), using the Mark 1 only as a model. The course is 32 hours computer-based instruction (CBI) (9 lessons) and a 40 hour self-paced Academy lab. CBI subjects include radiation patterns, amplitude and phase control unit, clearance transmitter, monitoring, and flight inspections. Lab subjects include operation, maintenance, calibration, fault diagnosis of the CEGS facility, and one practical examination.

Prerequisites: None
And one of the following: 47703, 47716

47709   (CBI) End-Fire Glideslope (EFGS) Antenna System

Training Manager: AMA-420   Course Length: 72 hour(s)

This course provides training for technicians on the Instrument Landing System, Watts Antenna Company, End-Fire Glideslope Antenna. The course is 32 hours computer-based instruction (CBI) and a 40 hour self-paced Academy laboratory. CBI subjects include block diagram, schematic diagram, all units, and circuit cards. Laboratory subjects include alignment and calibration of an EFGS system. Some laboratory procedures are outdoors. Bring proper clothing for all weather. Current versions of ILS Maintenance Order, General Maintenance Order, Battery Maintenance Order, and TI are required. There is also one practical examination at the end of the lab portion of the course.

Prerequisites: 47703
And one of the following: 47708, 40240, 88227

47710   (CBI) Mark 20 Instrument Landing System (ILS)

Training Manager: AMA-420   Course Length: 104 hour(s)

This course provides training for technicians on the Mark 20 ILS. The course is 40 hours computer-based instruction and a 64 hour Academy   laboratory. CBI subjects include familiarization, theory of operation, signal flow, and menus on marker beacon, localizer, Farfield monitor, glideslope, RICE, and LCU. The laboratory covers maintaining, troubleshooting, and repairing the Mark 20 System and the components, and one practical examination.

Prerequisites: 40283
And one of the following: None

47711 (CBI/MM) Low-Level Windshear Alert Sys (LLWAS) Climatronics

Training Manager: AMA-420 Course Length: 80 hour(s)

This course provides training for technicians on the LLWAS Phase 2 Climatronics, Type FA-10239. The course is 32 hours correspondence study, 8 hours computer-based exercises (CBE), and 40 hours Academy laboratory. Correspondence study subjects include LRU identification, breakdown, and system operation and maintenance. CBE subjects include system simulations and the end-of-course exam. Laboratory subjects include system alignments, performance checks, and fault isolation.

Prerequisites: 47504
And one of the following: 44013, 44020

47713 (CBI/MM) Low-Level Windshear Alert System (LLWAS/FA-10240)

Training Manager: AMA-420 Course Length: 68 hour(s)

This course provides training for AF personnel on LLWAS, Type FA-10240. The course is 24 hours correspondence study, 4 hours computer-based exercises (CBE), and 40 hours Academy laboratory. Correspondence study subjects include system concepts, major and subassembly component identification, communication functions, display interpretation and characteristics, block diagrams, signal flow and paths, and the maintenance data terminal (MDT). CBE subjects include system concepts, operational checks, and block diagrams. Laboratory subjects include system operation, verification, performance, and analysis.

Prerequisites: 47504
And one of the following: 44013, 44020, 88440

47714 (CBI/MM) DME Model 1118 With ERMM

Training Manager: AMA-420 Course Length: 80 hour(s)

This course provides training for technicians and engineers on the Distance Measuring Equipment (DME) ASII, Inc., Model 1118 with Enhanced Remote Maintenance Monitoring (ERMM). The course is 50% correspondence study with the final examination on the CBI platform and 50% Academy laboratory. Correspondence study subjects include theory of operation and maintenance. Laboratory subjects include alignment, maintenance checks, and fault isolation. Personnel who have already taken course 40278 should not take this course. The ERMM portion is covered in 45205 for those who have completed course 40278.

Prerequisites: None
And one of the following: 44215, 40276, 40284

47715 (CBI/MM) Mark 1 D/E/F ILS

Training Manager: AMA-420 Course Length: 344 hour(s)

This course provides training for technicians, engineers, and developmental technicians on the Mark 1 D/E/F Instrument Landing System (ILS). This course is 22 hours CBI, 188 hours self-study, and 136 hours of Academy laboratory. CBI and self-study subjects include block diagrams, controls and indicators, adjustments, flight inspection, and an examination on the CBI platform. Laboratory subjects include alignment and calibration procedures for the localizer, glideslope, markers, and Remote Monitoring System.

Prerequisites: None
And one of the following: None

47716 (CBI/MM) Wilcox Mark 1F ILS

Training Manager: AMA-420 Course Length: 304 hour(s)

This course provides training for technicians, engineers, and developmental technicians on the Wilcox Mark 1F Instrument Landing System (ILS), including localizer, glideslope, markers, and remote receivers. The course is 186 hours correspondence study, 22 hours CBE's, tests, and 96 hours Academy laboratory. Correspondence study and CBI subjects include block diagram and circuit diagram for all units and circuit cards. Laboratory subjects include alignment and calibration of localizer, glideslope, markers, and remote receiver to current standards. This course includes an Academy lab examination.

Prerequisites: None
And one of the following: 40233, 40283, 88220, 88257

47802 (CBI) Radar Beacon Performance Remote System Monitor (RSM)

Training Manager: AMA-450 Course Length: 48 hour(s)

This course provides training for engineers on the Radar Beacon Performance Remote System Monitor, 880140 RSM group. The course is 3 hours computer-based instruction (CBI) and 18 hours field-conducted lab. Subjects include system concepts, transponder concepts, interface with beacon systems/system tolerances, encoding and decoding circuits, receiver circuits, and troubleshooting.

Prerequisites: None
And one of the following: 40335, 40339, 45309, 45310, 47706

48023 International Power Machines, 50/250 KVA PCS Meter

Training Manager: AMA-405 Course Length: 40 hour(s)

This course provides training for technicians on the uninterruptible 50/250 KVA Power Conditioning System (PCS). Subjects include theory of operation, troubleshooting, restoration, and system procedures.

Prerequisites: 44111
And one of the following: None

48024   Balanced Power Plus (BP+)

Training Manager: AMA-405   Course Length: 36 hour(s)

This course provides training for technicians on the International Power Machine (IPM)/Balanced Power Plus (BP+) 50-250 KVA Power Conditioning System (PCS). Subjects include theory of operation, troubleshooting, restoration, and systems procedures.

Prerequisites: None
And one of the following: 44111, 44117

48094   Distance Measuring Equipment (DME) (Butler/Wilcox)

Training Manager: AMA-405   Course Length: 120 hour(s)

This course provides training for technicians on the Butler 1020 and Wilcox Model 596B/C DME ground station. Subjects include block diagrams; signal flow and schematic diagrams of the transponder, monitor, control unit, and test unit; alignment and test procedures for transponder and monitor; operation testing; hands-on troubleshooting; and fault finding on the DME.

Prerequisites: 44215
And one of the following: None

48101   5960 Distance Measuring Equipment (DME), Wilcox

Training Manager: AMA-405   Course Length: 80 hour(s)

This course provides training for technicians on the Wilcox 5960 Distance Measuring Equipment (DME). Lectures cover the Wilcox 5960 DME. Laboratory sessions include fault diagnosis, performance analysis, test procedures, use of test equipment, and routine checks and adjustments.

Prerequisites: 44215
And one of the following: None

48107   Category III Instrument Landing System (ILS)

Training Manager: AMA-405   Course Length: 120 hour(s)

This course provides training for technicians on the category III, ILS. Subjects include system theory and laboratory training on troubleshooting, alignment, and adjustments.

Prerequisites: None
And one of the following: 40233, 44415, 47000, 40283

48176   Wilcox 476B/585B VHF Omnidirectional Range (VOR)

Training Manager: AMA-405   Course Length: 120 hour(s)

This course provides training for technicians on the Wilcox VOR. Lectures and laboratory exercises cover VOR theory; station block diagram; circuit analysis of transmitter, goniometer, antenna, radio-frequency (RF) phasing, monitor field detector, local control, and keyer; station alignment; and error curve analysis.

Prerequisites: None
And one of the following: None

48180   Instrument Landing System (ILS) ASII

Training Manager: AMA-405   Course Length: 80 hour(s)

This course provides training for technicians on the Airport Systems International, Incorporated 1100 Series ILS. Lectures include the 1100 Localizer, 1110 Glideslope, and 1130 Marker Beacon. Laboratory sessions cover fault diagnosis, performance analysis, test procedures, use of test equipment, and routine checks and adjustments.

Prerequisites: None
And one of the following: 40233, 40283

48200   Mark 10 Instrument Landing System (ILS), Wilcox

Training Manager: AMA-405   Course Length: 80 hour(s)

This course provides training for technicians on the Wilcox Mark 10 Instrument Landing System (ILS) equipment. Subjects include localizer, glideslope, and Marker Beacon System theory of operation through maintenance and troubleshooting at the LRU level.

Prerequisites: 44020
And one of the following: 40233, 40283

48213   NBP Dual Mode ALSF-2/SSALR

Training Manager: AMA-405   Course Length: 160 hour(s)

This course provides training for technicians, engineers, SPS's, and FAATC personnel on the New Bedford Panoramex Dual Mode ALSF-2/SSALR, Type FA-10700. The course is 50% lecture and 50% laboratory. Lecture subjects include electrical safety (high voltage), electro-static discharge (ESD), system overview, safety disconnect switch, 480 VAC input cabinet, 50 KVA transformer, distribution panel, high voltage output cabinet, lamp holder shorting device, constant current regulator, control and monitor cabinet, Remote control cabinet, Remote electronic cabinet, and individual flashers and testers. Laboratory subjects include operation, preventive maintenance, and troubleshooting.

Prerequisites: 47001
And one of the following: 44111, 47600

Prerequisites: None
And one of the following: None

48229 Exide UPS Powerware - 62.5 KVA

Training Manager: AMA-405 Course Length: 36 hour(s)

Course provides Level 1 training for technicians on Exide Uninterruptible Power Source (UPS) Powerware System 62.6 KVA. The course is 50% lecture and 50% laboratory. Subjects include theory of operation, troubleshooting, restoration, and system procedures. Power handling subassemblies are removed and their components, such as SCR and transistors, are removed, checked, and replaced. The course emphasis is on practical application. Exide Powerware Systems are installed at selected automated flight service stations (AFSS's) (approximately 30), airport surveillance radars (ASR), and air traffic control tower (ATCT) NAS facilities.

Prerequisites: None
And one of the following: 44111, 47600, 44117

48232 UPS Balanced Power (BP) II - Exide

Training Manager: AMA-405 Course Length: 36 hour(s)

This course provides training for technicians on the Exide uninterruptible power source (UPS) BP II. This course is 40% lecture and 60% laboratory. Subjects include theory of operation, troubleshooting, restoration, and system procedures.

Prerequisites: None
And one of the following: 44111, 44117

48241 Digital Voice Recording System (DVRS)

Training Manager: AMA-405 Course Length: 24 hour(s)

This course provides training for technicians and air traffic control personnel on the Digital Voice Recording System (DVRS). Lectures cover theory of operation and evaluation, preventive maintenance procedures, and fault analysis. Laboratory sessions cover system operating procedures, system evaluation, routine test procedures, adjustments and isolation of faults.

Prerequisites: None
And one of the following: 40406, 44020

48245 IBM Enterprise System (Rollout 3)

Training Manager: AMA-405 Course Length: 32 hour(s)

This course provides training for personnel responsible for maintaining and certifying the Display Channel Complex Rehost (DCCR). The course is lecture and laboratory. Subjects include the service strategy and procedures necessary to invoke diagnostic routines and fault isolate to the lowest replaceable unit (LRU).

48253 UPS-30/160 KVA Balanced Power (BP) III

Training Manager: AMA-405 Course Length: 36 hour(s)

This course provides training for technicians on the Uninterruptible Power Source (UPS) Powerware Plus 30-160 KVA Balanced Power (BP III). Subjects include theory of operation, troubleshooting, restoration, and system procedures. Each student should bring a 486 laptop with math coprocessor and an interconnect cable at least 6 feet long so the software (P80-Tool) can be loaded/tested. The interconnect cable must have a 9-pin female connected to the laptop (depending on the laptop) to a 25-pin male connected to the UPS. Each student will receive a copy of P80-Tool software that would work best if it can be tested on each student's laptop during the course.

Prerequisites: None
And one of the following: 44111, 44117

48262 ASII Model 1118 DME With RMM

Training Manager: AMA-405 Course Length: 56 hour(s)

This course provides training for technicians and engineers on the Distance Measuring Equipment (DME) Model 1118 with remote maintenance monitoring (RMM). The course is a combination of lecture and laboratory. Lecture subjects include operations and maintenance. Laboratory subjects include alignments, adjustments, and fault isolation.

Prerequisites: 44215, 44020
And one of the following: 40276, 40284

48272 Telecommunications Management and Operations Financial Tools

Training Manager: AMA-405 Course Length: 16 hour(s)

This course provides training for telecommunication specialists, network planners, and budget analysts in the procedures for ordering telecommunications services. The course is 50% lecture and 50% laboratory. Subjects include Telecommunications Management and Operations (TM&O) financial tracking systems, accessing FinTrack, transferring funds, funds transfer requests status reports, TSR estimates and CC&O billing reports, IA mod status report, ACC/IA mod relationships, TSR completion report, ACC status report, and candidate FTRS report.

Prerequisites: None
And one of the following: None

48273 AIDCS for Air Traffic System Specialists

Training Manager: AMA-405 Course Length: 17 hour(s)

This course provides training for technicians, engineers, SPS's and NAS managers (FS-2101's) on the Air Traffic System Interfacility Data Communications System (AIDCS). The course consists of 30% lecture and 70% laboratory. Subjects include system overview, system operations, error detection, hardware maintenance, software maintenance, and system certification.

Prerequisites: None
And one of the following: 41705, 48238, 48239, 49266, 49267

48274   OASIS First-Level Maintenance Training

Training Manager: AMA-405 Course Length: 40 hour(s)

This course provides training for technicians on the Operational and Supportability Implementation System (OASIS) at sites where the system has been installed. The course consists of lecture and laboratory sessions. Subjects covered include identification of OASIS assemblies and subassemblies, power up/down, start over and recovery, operational performance checks, and diagnostics and fault isolation to the line replaceable unit (LRU).

Prerequisites: None
And one of the following: None

48277   AMASS Cadre Hardware Maintenance Training

Training Manager: AMA-405 Course Length: 36 hour(s)

Airport Movement Area Safety System (AMASS) training will include preventive and corrective maintenance, pentium operation, test-equipment operations, general algorithm flows, testing and system troubleshooting, and fault isolation and diagnostics. This training falls under the full-scale development (FSD) contract.

Prerequisites: 40381
And one of the following: None

48278   AMASS Hardware Maintenance Training

Training Manager: AMA-405 Course Length: 72 hour(s)

Training will include theory of operation, block and Functional Diagrams, airport movement area safety system (AMASS) computer operation, the operation of specialized test equipment, general algorithm flows, testing and system troubleshooting, system fault isolation and diagnostics to the Line Replaceable Unit (LRU) level. This training falls under the production contract.

Prerequisites: 40381
And one of the following: None

48279   ARSR-4 Genrad/Fluke Hardware and Software

Training Manager: AMA-405 Course Length: 120 hour(s)

Hardware training covers signal flow, fault isolation, repair, test and checkout of support equipment and system-level line replaceable units (LRU's), electrostatic discharge (ESD) awareness/procedures, data/signal flow of test-set subassemblies to block-diagram level, turn-on and checkout, recognition of test-set faults, test repair and verification of selected unit under test (UUT) or serviceable UUT's, and use of test-program sets (TPS) to test UUT's. Software training covers modification of program software to incorporate circuit changes/additions for the ARSR-4 subassemblies, structure and layout of test software, modification of test program software and executive code.

Prerequisites: 40408
And one of the following: None

48281   UPS 180/500 KVA Balanced Power (BP) III - Exide

Training Manager: AMA-405 Course Length: 36 hour(s)

This course provides training for technicians on the Exide uninterruptible power source (UPS) Powerware Plus 180/500 KVA BP III. The course is 40% lecture and 60% laboratory. Subjects include troubleshooting, restoration, and system procedures.

Prerequisites: None
And one of the following: 44111, 44117

48288   PRM Software

Training Manager: AMA-405 Course Length: 120 hour(s)

This course provides training for AOS software engineers on the precision runway monitoring system. The course consists of lecture and laboratory sessions. Subjects include system overview, analyzing software errors, building site parameters, data reduction analysis, identifying false targets, and loading eproms.

Prerequisites: 48531
And one of the following: None

48291   Comprehensive Powerlogic System

Training Manager: AMA-405 Course Length: 36 hour(s)

This course provides training for technicians on operation and configuration of the powerlogic series 2000 circuit monitor and power meter. The course subjects are metering principles, including instrument transformers, polarities, and convection.

Prerequisites: None
And one of the following: 44111, 47600, 44117

48292 UPS-180/500 Balanced Power (BP) III - Level II

Training Manager: AMA-405 Course Length: 36 hour(s)

Course provides level II (ADV) training for technicians and engineers on Exide UPS 180/500 KVA balanced power (BP) III and is 50% lecture and 50% lab. The training reviews and expands on topics covered in Level I training. Advanced troubleshooting procedures are described to further enhance the user in differentiating between hardware and software problems. Training is designed for individuals who perform installation verification and full maintenance of the UPS including parallel redundant configuration. The course is also designed for individuals who provide technical support and basic training to on-site personnel.

Prerequisites: None
And one of the following: 47600, 44111, 44117

48293 Quantum Series Maintenance (Modicon PIC)

Training Manager: AMA-405 Course Length: 27 hour(s)

This course provides training for technicians on how to troubleshoot and perform maintenance on systems controlled by the quantum automation series controller and associated hardware. Multi-level fault isolation and correction are featured, and emphasis will be placed on software diagnostics.

Prerequisites: None
And one of the following: 47600, 44111, 44117

48296 Factorylink Electronic Control System (ECS) Basic

Training Manager: AMA-405 Course Length: 36 hour(s)

This course provides training for personnel who will be using Factorylink graphical software. This is a beginning level course that provides basic overview of Factorylink modules. At the end of the course, students will be able to design, configure, and troubleshoot a Factorylink application. Factorylink is the graphical software that will be used in the workstation of the power monitor and control system (PMCS) portion of the Critical Power Distribution System (CPDS).

Prerequisites: None
And one of the following: 44111, 47600, 44117

48301 NASTEP Concepts

Training Manager: AMA-405 Course Length: 24 hour(s)

This course provides training for airway facilities NAS technical evaluators on the NAS technical evaluator program (NASTEP). The course is 60% lecture and 40% laboratory. Subjects include introduction and overview, categories, priorities, assignment of an action office, and summary. Slide projections, group exercises, and classroom discussions are methods used in the course.

Prerequisites: None
And one of the following: None

48302 Mitsubishi 2033A DDC Series UPS System

Training Manager: AMA-405 Course Length: 40 hour(s)

This course provides training for technicians on the Mitsubishi 2033A DDC Series Uninterruptible Power Supply (UPS) System. The course is 17 hours lecture and 23 hours laboratory. Lecture subjects include general power electronics concepts as related to the 75KVA 2033A UPS, system schematics and functionality, monitoring menu, component identification, and system operation. Laboratory subjects include troubleshooting and component disassembly and replacement.

Prerequisites: None
And one of the following: 44111, 44117

48303 AIX for DSR

Training Manager: AMA-405 Course Length: 40 hour(s)

This course covers the basics of the AIX operating system, including file structure, basic AIX commands, file editing, and system management interface tool (SMIT). Also included are basic AIX system administration functions including user security, group functions, and file functions. The last part of this course covers display system replacement (DSR) backup/restore functions including MAKESYSB, reel backup and restore, and PCU software backup/restore. This course plus Course 48217, DSR for SPS, equates to course 48290, DSR software for SPS.

Prerequisites: 48217
And one of the following: None

48306 Modicon PIC Level 1 Programming

Training Manager: AMA-405 Course Length: 28 hour(s)

This course provides training for personnel on how to program quantum series programmable logic controllers (PLC) to include: system hardware, system configuration, and programming. Programming techniques range form basic functions to arithmetic operations and block moves using discrete input/output (I/o), as well as register and analog I/O.

Prerequisites: None
And one of the following: 47600, 44111, 44117

48307 Con-Cept Programming

Training Manager: AMA-405 Course Length: 32 hour(s)

This course provides training for personnel on how to configure quantum programmable logic controllers (PLC) using Con-Cept software, set up a project, and learn to use the function block, ladder

diagram, sequential functions chart, and structured text IEC editors. The student will also learn how to use the derived function block and C++ toolkit editors, as well as generate documentation of the program.

Prerequisites: None
And one of the following: 47600, 44111, 44117

48308   Oceanic S1R for NAS/NOM

Training Manager: AMA-405   Course Length: 36 hour(s)

This course provides training for OCS NAS/NOM/AOS-600 personnel who have a working knowledge of the current ODAPS/OFDPS Series 1 Subsystem. The course provides training on the transition from series 1 subsystem to the series 1 replacement (S1R) subsystem (H-50) processor. Subjects include processor, managing the console, and conducting operational tasks. Training also includes equipment configuration, equipment characteristics, system indicators and controls, system monitoring, system and software problem determination, and operations. Students must have a working knowledge of the ODAPS/OFDPS System.

Prerequisites: None
And one of the following: None

48309   Oceanic S1R for Technicians and SPS

Training Manager: AMA-405   Course Length: 56 hour(s)

This course provides training for OCS hardware technicians and SPS's who have a working knowledge of the current ODAPS/OFDPS Series 1 Subsystem. training covers transition from series 1 subsystem to the SR1 REP (H-50) processor. Subjects include the processor, managing the console, and conducting operational tasks. Training also includes operational procedure differences for equipment configuration, equipment characteristics, system indicators and controls, system monitoring, system problem determination, hardware maintenance, subsystem operation, and verify/test. Students must have a working knowledge of the ODAPS/OFDPS system, series 1 operator position, and interface hardware.

Prerequisites: None
And one of the following: None

48310   Oceanic S1R for Computer Operators

Training Manager: AMA-405   Course Length: 16 hour(s)

This course provides training for OCS computer operators who have a working knowledge of the current ODAPS/OFDPS Series 1 Subsystem. The course provides training on the transition from the series 1 subsystem to the series 1 replacement (SR1) subsystem (H-50) processor. Subjects include the processor, managing the console, and conducting operational tasks. Training also includes operational procedure differences for equipment configuration, equipment characteristics, system indicators and controls, system monitoring, and operation. Students must have a working knowledge

of the ODAPS/OFDPS System.

Prerequisites: None
And one of the following: None

48311   TLS Operation and Maintenance

Training Manager: AMA-405   Course Length: 64 hour(s)

This transponder landing system (TLS) training consists of 60% lecture/discussion which presents information from the technical instruction manual (TIM); and 40% laboratory which utilizes the TLS base-station equipment, remote control unit (RCU), and maintenance interface unit (MIU). Students will use the TLS technical instruction manual, maintenance technician student guide, and student handouts.

Prerequisites: None
And one of the following: None

48312   Transponder Landing System (TLS) Operator's Course

Training Manager: AMA-405   Course Length: 24 hour(s)

This course provides training for operators on the transponder landing system (TLS). The course is 50 percent lecture by the contractor and 50 percent hands-on training by the students. Laboratory subjects include system theory of operation, system configuration, operations checks, and adjustments. This is a non-federal system that will be located at six sites and operated and maintained by the contractor.

Prerequisites: None
And one of the following: None

48313   TAIU System (Stand-Alone)

Training Manager: AMA-405   Course Length: 24 hour(s)

The course provides training for technicians who do not have ASDE/AMASS maintenance responsibilities. It will also cover performing operational and functional checks and periodic preventive maintenance. In addition, the training will include monitoring, troubleshooting, fault isolation to the line replacement unit (LRU), and returning the terminal automation interface unit (TAIU) to normal operations.

Prerequisites: None
And one of the following: None

48314   Advanced Fault Management System (AFMS)

Training Manager: AMA-405   Course Length: 24 hour(s)

This course provides training for AFMS system administrators to customize, maintain and operate the Advanced Fault Management System (AFMS) at the national maintenance coordination centers

(NMCC's)for bandw idth management. The course is 12 hours lecture and 12 hours laboratory. Subjects covered include start up; monitoring activity; creating automation and topology maps; execution of sets, gets, and read traps; manage alarms, display nodes and link view s; and query and perform node configurations.

Prerequisites: None
And one of the following: None

48316   DRPDS Hardware Maintenance

Training Manager: AMA-405 Course Length: 432 hour(s)

This course provides training for technicians on how to troubleshoot and perform maintenance on the Sual Redundant Pow er Distribution Eystem (DRPDS) at consolidated tracon locations. DRPDS training consists of the follow ing segments; DRPDS System overview , sw itchgear, Exide UPS, Pow er Monitor and Control System (PMCS), static automatic transfer sw itch/pow er distribution unit (SATS/PDU), Kohler engine generators, auxiliary equipment, and system restoration.

Prerequisites: None
And one of the following: 44111, 44117

48317   Advanced Fault Management System (AFMS) for System Admins

Training Manager: AMA-405 Course Length: 40 hour(s)

This training is for system administrators to customize, maintain, and operate the advanced fault management system (AFMS) at the national maintenance coordination centers (NMCC) for bandw idth management. The course is 20 hours lecture and 20 hours laboratory. Subjects covered include startup, monitoring activity, creating automation and topology maps, customizing the AFMS to fit the needs of the netw ork, execution of the sets and gets and read traps, manage alarms and display nodes and link view s, query, and perform node configurations.

Prerequisites: 47409
And one of the following: None

48318   ASII Model 1119 DME With RMM

Training Manager: AMA-405 Course Length: 64 hour(s)

This equipment-specific course provides training for technicians w ho maintain the ASII Model 1119 High Pow er Distance Measuring Equipment (DME). The course is 32 hours lab and 32 hours lecture. With completion of the course, the student w ill be able to operate, adjust, and align the DME equipment according to manufacturers specifications. The technician w ill be capable of troubleshooting the DME w ith remote maintenance monitoring (RMM) to the module, subassembly or line replaceable unit (LRU).

Prerequisites: None
And one of the following: 44215, 40276, 40284

48324   AMASS Second-Level Engineering

Training Manager: AMA-405 Course Length: 160 hour(s)

This course provides training for engineers and softw are maintenance personnel at aos-200 on the airport movement area safety system (AMASS). The course is 80 hours lecture and 80 hours laboratory. Lecture subjects include AMASS operation, system functions, basic system algorithms, and application softw are structure. Laboratory subjects include use of development and debugging tools, and modification of softw are.

Prerequisites: None
And one of the following: None

48325   Automated Weather Sensor System (AWSS) HW Maintenance

Training Manager: AMA-405 Course Length: 80 hour(s)

This course provides training for technicians on the AWSS equipment. The course is 32 hours lecture and 48 hours laboratory. Lecture subjects include system operations, diagnosis, and remote maintenance monitor (RMM). Laboratory subjects include operation, preventive maintenance, and troubleshooting.

Prerequisites: 47504
And one of the following: 44013, 44020

48331   ATSS Maintenance Delta

Training Manager: AMA-405 Course Length: 80 hour(s)

This course provides training for technicians on the softw are enhancements for STARS full and emergency service. The course is lecture and laboratory. Subjects include full and emergency service level operating features, hardw are configuration, and maintenance and repair actions. The versions of the softw are used provide support to MOT and E at Eglin AFB.

Prerequisites: None
And one of the following: None

48333   Terminal Automation Interface Unit (TAIU)

Training Manager: AMA-405 Course Length: 24 hour(s)

This course provides training for technicians on the TAIU. The course is 4 hours lecture and 20 hours laboratory (approximately 2 hours per student). Lecture subjects include theory of operation and interface betw een ARTS III, SCIP, and ASDE-3. Laboratory subjects include operational and functional checks, periodic preventive maintenance, monitoring, troubleshooting, fault isolation to the LRU, and returning the

TAIU to normal operations.

Prerequisites: None
And one of the following: None

48334   Controller Pilot Data Link Communications for Sys Admins

Training Manager: AMA-405   Course Length: 40 hour(s)

This course provides training for technicians and engineers on controller pilot data link communications (CPDLC) w ithin the NAS. The course is 20 hours lecture and 20 hours lab. Lecture subjects include the role of the CPDLC in the NAS, CPDLC theory, components, messages, startup/shutdow n procedures peripheral devices, CPDLCLAN/WAN, routers, sw itches, and GUI. Lab subjects include CPDLC system operation, monitoring, maintenance, and troubleshooting.

Prerequisites: None
And one of the following: None

48337   Promina 800 Series Operations

Training Manager: AMA-405   Course Length: 20 hour(s)

This course provides training for technical personnel w ho w ill use the operator interface to manage, monitor, and/or configure the N.E.T. Promina Multi-service Access Platform (PMAP) and Multi-service Bandw ith Manager (MBM) netw ork. The course is 10 hours lecture and 10 hours laboratory. Subjects include usage of the N.E.T. PMAP/MBM operator interface to configure netw orks, manage bandw ith resources, monitor netw ork usage, and maintain netw ork operations by performing diagnostics and interpreting alarms and events.

Prerequisites: None
And one of the following: None

48338   Promina 800 Series Manager

Training Manager: AMA-405   Course Length: 16 hour(s)

This course provides training for control site technical personnel w ho w ill use the Promina 800 series MAP manager as their central point of control for managing their N.E.T. Promina 800 series multi-access platforms and N.E.T. legacy nodes in their netw ork. The course is 8 hours lecture and 8 hours laboratory. Subjects include monitoring the N.E.T. netw ork; executing SETS and GETS from the MIB brow ser; read tapes from the event brow ser; manage alarms, display node, and link view s via netscape; query and perform node configuration.

Prerequisites: 48337
And one of the following: None

48339   Promina 800 Series Maintenance

Training Manager: AMA-405   Course Length: 20 hour(s)

This course provides training for netw ork managers and technical personnel w ho w ill manage and maintain the N.E.T. Promina multi-service access platform (PMAP) and the multi-service bandw idth manager (MBM) netw ork using the operator interface and card indicators. The course is 10 hours lecture and 10 hours laboratory. Subjects include configuring, installation, replacement, and cabling N.E.T. PMAP/MBM hardw are; use and interpret N.E.T. PMAP/MBM hardw are indicators and controls; correlate hardw are indicators w ith operator interface display for purposes of troubleshooting; and to perform appropriate diagnostic tests to isolate failed circuit or system components.

Prerequisites: 48337
And one of the following: None

48342   CPDLC for System Administrators

Training Manager: AMA-405   Course Length: 40 hour(s)

This course provides training for technicians, engineers and FAA Technical Center personnel on the controller pilot data link communication system. The course is 20 hours lecture and 20 hours laboratory. Lecture subjects include identification of CPDLC components, system data flow , theory of operation, and maintenance philosphy. Laboratory subjects include maintenance procedures, troubleshooting procedures, and repair/replacement procedures.

Prerequisites: 40424
And one of the following: None

48344   DVRS Type II

Training Manager: AMA-405   Course Length: 40 hour(s)

This course is conducted at each site after system installation and before system commissioning. This course provides training for technicians and air traffic control personnel on DVRS, Type II. Lectures cover theory of operation and evaluations, preventative maintenance procedures, and fault analysis. Laboratory sessions cover system operating procedures, system evaluation, routine test procedures, adjustments, and isolation of faults.

Prerequisites: None
And one of the following: 44020, 40406

48345   Mark 20A ILS

Training Manager: AMA-405   Course Length: 80 hour(s)

This course is for airw ay facilities technicians and engineers and includes the follow ing subject areas: MK20A equipment familiarization, principles of operation, functional block diagrams, signal flow , system maintenance, corrective maintenance, periodic maintenance of the localizer system and its subassemblies and

antenna system, periodic maintenance of the glideslope system and its subassemblies and antenna system, and ancillary equipment (RICE, RCSE, RCIU, and markers).

Prerequisites: 40283
And one of the following: None

48348   Mitsubishi 9700 Series UPS System

Training Manager: AMA-405 Course Length: 24 hour(s)

This course provides training for technicians on the Mitsubishi 9700 Series Uninterruptible Power System (UPS). The course consists of 12 hours lecture and 12 hours laboratory. Subjects include general power electronics concepts as related to 9700 Series UPS, system schematics and functionality, monitoring menu, component identification, system operation, troubleshooting, and component disassembly and replacement.

Prerequisites: None
And one of the following: 44111, 44117

48350   Telecommunications Service Management (TSM) Circuit Tracking

Training Manager: AMA-405 Course Length: 16 hour(s)

This course provides training for telecommunications specialists, budget analysts, regional engineers, and facility managers who use the Telecommunications Service Management (TSM) circuit tracking. This course is 8 hours of lecture and 8 hours of laboratory. Lecture includes introduction to the TSM Ordering System (TOS), creating a request for telecommunications service, introduction to TSR entry, introduction to communications service request entry, and agency orders. Laboratory subjects include hands-on TSM tracking activities.

Prerequisites: None
And one of the following: None

48351   Telecommunications Service Management (TSM) Ordering System

Training Manager: AMA-405 Course Length: 16 hour(s)

This course provides training for telecommunications specialists, budget analysts, regional engineers, and facility managers who use the Telecommunications Service Management (TSM) Ordering System. This course is 8 hours of lecture and 8 hours of laboratory. Lectures include TSM circuit tracking overview, gathering data, creating a new end-to-end introduction to the treeview, associating information, working with orders and billing data. laboratory subjects include hands-on TOS activities.

Prerequisites: None
And one of the following: None

48352   Mark 20A ILS System, Delta Training

Training Manager: AMA-405 Course Length: 24 hour(s)

This course provides supplementary (difference) training for technicians who have completed the MK-20 ILS training (course 47710). The course is 8 hours of classroom instruction and 16 hours of hands-on equipment training. Lecture includes identification of differences between the MK-20 and MK20A systems. The laboratory covers troubleshooting and repair of the MK-20A system and its components.

Prerequisites: 47710
And one of the following: None

48356   ASDE-X Hardware Maintenance

Training Manager: AMA-405 Course Length: 160 hour(s)

This course provides training for technicians on the Airport Surface Detection Equipment Model X (ASDE-x) Radar System. The course is 80 hours lecture and 80 hours laboratory/walkthrough. Lecture subjects include system operation, multilateration system, surface movement radar system, remote monitoring system, maintenance, and troubleshooting. Laboratory subjects include LRU removal and replacement, maintenance, and troubleshooting.

Prerequisites: 40423, 42058, 44320
And one of the following: None

48357   ASII Model 2100 Category II/III ILS

Training Manager: AMA-405 Course Length: 80 hour(s)

This course provides training for technicians on the ASII 2100 Model ILS. Lecture includes system functional block diagram, terminal equipment, rear panel, display ASSY 1A1, battery charger power supply, synthesizer ASSY, power amplifier ASSY localizer and glideslope, monitor CCA, RMS microprocessor CAA, transfer/recombiner drawer ASSY, CE APCU drawer ASSY, and remote maintenance monitor. Lab sessions cover performance analysis, test procedures, use of test equipment, and routine checks and adjustments. Student must have knowledge in digital circuit theory microprocessor or microcontroller functional operation theory, and practical ILS flight check.

Prerequisites: 40283
And one of the following: 44013, 44020

48358   STARS Initial Adaptation Training

Training Manager: AMA-405 Course Length: 184 hour(s)

This course provides training to operational support facility (OSF) specialists for the Standard Automation Replacement System (STARS). This course is 73 hours of lecture and 111 hours of laboratory. It trains the specialist to create, maintain, and update the site adaptations for STARS, investigate system problems, evaluate

and resolve national AOS requests (NAR) w ith STARS, and all security duties relevant to PSF specialist positions involved w ith STARS.

Prerequisites: None
And one of the following: None

48360   Precision Runway Monitor (PRM) Tracon

Training Manager: AMA-405 Course Length: 40 hour(s)

This course is for technicians and engineers w ho maintain the Precision Runw ay Monitor (PRM) TRACON equipment. This course is conducted by Raytheon at field installation locations. Training includes the indicator portion of the PRM as w ell as maintenance of PRM hardw are.

Prerequisites: None
And one of the following: None

48361   ARTS IIIE Power PC Update Course

Training Manager: AMA-405 Course Length: 32 hour(s)

This course provides training on the operation and maintenance of the track processor, common and system monitoring console as a result of the pow er PC modification to their associated chassis. This course is 16 hours lecture and 16 hours laboratory. The lab includes softw are dow nloading to various chassis, initializing MV ME2700 single board, preventative maintenance, system troubleshooting, and graphical user interface operation on the system monitoring console personal computer.

Prerequisites: 42052
And one of the following: None

48362   MALSR With RMS

Training Manager: AMA-405 Course Length: 24 hour(s)

This course provides training for technicians and engineers on the Medium Intensity Approach Light System w ith Runw ay Alignment Indicator Lights (MALSR) and Remote Monitor System (RMS) manufactured by the DME Corporation. The course is 12 hours lecture and 12 hours lab. Lecture subjects include system and componenet description, layout and configuration, circuit description, interconnection diagrams, component operation, and detailed RMS description and operation. Lab subjects include equipment layout, configuration, component location, maintenance tasks, adjustments, system troubleshooting, and RMS operation and use.

Prerequisites: 44111
And one of the following: None

48364   A+ Certification Preparation Hardware Fundamentals

Training Manager: AMA-405 Course Length: 40 hour(s)

This course provides training on PC hardw are and system maintenance procedures for hardw are components, pow er supply, upgrades, netw orking, maintenance, and troubleshooting. This course is 20 hours lecture and 20 hours laboratory. The lab includes exercises on configuration settings, upgrade systems, configuring SCSI devices, installing printers and monitors, removing and replacing components, and troubleshooting post errors.

Prerequisites: None
And one of the following: None

48365   A+ Certif. Preparation Operating Sys Fundamentals (CompUSA)

Training Manager: AMA-405 Course Length: 40 hour(s)

This course provides training on installation procedures using emergency boot diskettes, managing printers, and other devices such as netw orking and Internet access. This course is 20 hours lecture and 20 hour laboratory. The lab exercises include installing Window s operating systems, managing Window s, operating Fdisk utility, managing system files, configuring netw ork and Internet access, and troubleshooting the operating system errors.

Prerequisites: None
And one of the following: None

48366   Network+ Certification Preparation (CompUSA)

Training Manager: AMA-405 Course Length: 40 hour(s)

This course provides training for the 2002 Comptia's Netw ork+ Exam N10-002. The lecture includes a w ide range of netw orking technologies. This course is 20 hours lecture and 20 hours laboratory.

Prerequisites: None
And one of the following: None

48367   PowerPC Delta

Training Manager: AMA-405 Course Length: 40 hour(s)

This course provides Delta training for AF personnel on the Pow erPC CP. This course is 16 hours lecture/24 hours lab. Lecture includes theory and operation of the Pow erPC CP, TP, and SMC subsystems, the VME chassis, Motorola MV ME2700 single-board computer, digital input/output card, serial interface card, four-port ethernet card, SCSI devices, transition modules, netw ork sw itches, system softw are, and system graphical user interfaces on the SMC PC. Lab subjects include softw are dow nloads to the CP, TP, and SMC, extended

Page 73

diagnostics on all chassis, initializing the MVME2700 single-board computer, preventative maintenance, system performance monitoring, and troubleshooting.

Prerequisites: **42052**
And one of the following: None

48368 UNIX Essentials Featuring Solaris

Training Manager: AMA-405   Course Length: 32 hour(s)

This course is for ATSS and SPSS with automation responsibilities that support URET and CTAS systems. This course provides instruction on using components of the desktop system, command line features, help resources, managing and viewing files and directories, changing Solaris directory contents, creating and modifying files, instruction on basic file permissions, controlling the user work environment, and using commands within the KORN shell. Skills gained include how to perform basic process and job control, creating archives, archiving files, compressing, viewing, and uncompressing files, and performing remote file transfers.

Prerequisites: **40423**
And one of the following: **40437, 40441, 47428**

48369 Intermediate System Administration for Solaris

Training Manager: AMA-405   Course Length: 40 hour(s)

This course is for ATSSS with automation responsibility that support systems at URET and CTAS ARTCC's. Training covers managing file systems, installing software, performaing system boot procedures, user and security administration, managing peripherals, processes (e.g., backup and restore), COMM links, formatting local disk devices, mount and unmounting different types of file systems, performing package and patch administration, using boot programmable read-only memory (PROM) commnads, and changing nonvolatile random access memory (NVRAM) parameters.

Prerequisites: **48368**
And one of the following: None

48370 Advance System Administration for Solaris

Training Manager: AMA-405   Course Length: 40 hour(s)

This course is for ATSSS with automation responsibilities that support systems at URET and CTAS ARTCC's. This course provides the necessary knowledge and skills to perform network basics, manage virtual file systems and core dumps, manage storage volumes, control access and configure system messaging, set up naming services, and perform installation procedures. This course is taken in preparation for Part II of the Sun System administration certification exam.

Prerequisites: **48369**
And one of the following: None

48371 Sun Systems Fault Analysis Workshop

Training Manager: AMA-405   Course Length: 40 hour(s)

This course is for ATSSS with automation responsibility that support systems at URET and CTAS ARTCC's. This course includes how to differentiate and repair selected hardware, system administration, resolve software problems, use an organized, total-system approach for fault analysis, isolate and repair system administration problems and mistakes, use Sunsolve TM and other Sun fault isolation facilities, recognize and patch selected operating system (OS) problems, load, execute, and interpret all Sun diagnostics, gather and interpret system error messages, and analyze system dumps, crashes, and hangs.

Prerequisites: **48370**
And one of the following: None

48372 Desktop System Maintenance

Training Manager: AMA-405   Course Length: 40 hour(s)

This course is for ATSSS with automation responsibilities that support systems at URET and CTAS ARTCC's. Skills gained include: installation of various desktop systems and associated peripherals, voltages within tolerances, system power-on and boot sequence, purpose of forth toolkit commands, selecting diagnostic tools, activating and configuring diagnostic tools, interpreting results of diagnostic tool output, identify, isolate, and repair system failures to the FRU level, functional characteristics of openboot TM PROM architecture, install peripheral and input/output (I/O) interface cards, simulate FSCK repair, run disk inquiry commands, and analysis and formatting of hard disk drive.

Prerequisites: **48371**
And one of the following: None

48373 Sun Enterprise Server Maintenance

Training Manager: AMA-405   Course Length: 40 hour(s)

This course is for ATSSS with automation responsibility that support systems at URET and CTAS ARTCC's. Course includes architecture for the Sun Enterprise 3500, 4500, 5500, and 6500 servers. Other subjects include server troubleshooting to the FRU level, locating, removing, and replacing server FRU's, performing Solaris TM operating environment and UNIX commands necessary for halting, booting, and maintaining server, using the forth toolkit to modify the openboot TM PROM, navigating the openboot TM PROM, retrieving and modifying NVRAM contents, retrieving power-on self-test (POST) reports and interpreting the results, and decoding LED indicators.

Prerequisites: 48372
And one of the following: None

48374 Integrated Terminal Weather System (ITWS) Production Model

Training Manager: AMA-405 Course Length: 64 hour(s)

This course provides training for technicians and engineers on the Integrated Terminal Weather System (ITWS) Hardware System and its interfaces. This course is 32 hours lecture and 32 hours laboratory. Subjects include equipment theory, site-level maintenance procedures, automated test tools, system-level control and monitoring, board-level fault isolation and replacement, and troubleshooting input/output devices.

Prerequisites: None
And one of the following: 12762, 40423

48375 9000NT Advanced Operations I

Training Manager: AMA-405 Course Length: 8 hour(s)

9000NT AdvanceD Operations I (Level 1, 2, or 3). This course will train the student to identify each piece of equipment and its function, start/stop and log in and out of the system, navigate through all tran submaps, determine the status of the modem, read alarm records, use the alarm browser to sort alarms and find modem symbols by name, alarms, and status. Additionally, the student will be able to reset the modem's symbol, monitor EIA signal levels, change the name of a modem to comply with the FAA naming conventions, put a modem or line into loop for testing, manually initiate and terminate dial restoral for a modem and take a snapshot of the current submap and store it for future reference.

Prerequisites: 47411
And one of the following: None

48376 9000NT Advanced Operations II (Level 2 Users)

Training Manager: AMA-405 Course Length: 8 hour(s)

9000NT Advanced Operations II (Level 1 or 2 access). This course will train students to explain fundamentals of network control, add devices and lines to the 9000 OMS database, upload modem configurations, check and modify various modem parameters, export and import modem configurations and modify or create symbols to execute commands. Additionally, the student will be taught to create additional submaps for site customization, to bypass the 9000 OMS window and send MB values to a modem via the SNMP MIB browser, to isolate basic problems with the 9000 OMS, monitor background processes, and evaluate network control performance.

Prerequisites: 47411, 48375
And one of the following: None

48377 9000NT Network Administration (Level 1)

Training Manager: AMA-405 Course Length: 8 hour(s)

9000NT Network Administration (Level 1 access). Level 1 users will be able to hide Internet maps to limit access, modify alarms, create a menu selection via a MIB application, perform hard drive backups and restorals. Students will also learn to backup, restore, and map topology files, add new users to the NT systems, and assign user levels.

Prerequisites: 47411, 48375, 48376
And one of the following: None

48378 9000NT Basic Operations (Level 4)

Training Manager: AMA-405 Course Length: 8 hour(s)

9000NT Basic Operations (Level 4 access). This course is for users who have modem monitoring responsibilities. The users will be able to navigate through all the modem submaps; determine modem status; start/stop and log in/out of the system, and read alarm records. The user will also be able to find modem symbols; monitor EIA signal levels RTS, CTS, DTR, DCD, and RSQ; gather, graph, display and print modem and CQMS and line CQMS statistics; archive alarm records, and print reports.

Prerequisites: 47411
And one of the following: None

48379 Atop Site Software Maintenance

Training Manager: AMA-405 Course Length: 240 hour(s)

This course is for SPS and AOS personnel at oceanic centers. The course is 50% lecture and 50% laboratory. Lecture provides instructor-led classroom training in the operational theory and maintenance of the Ocean 21 System with emphasis placed on the management of system archive data, security data, adaptation data, and local releases of developed and COTS software. Lab exercises will serve to reinforce subject matter presented in lecture while providing hands-on experience.

Prerequisites: None
And one of the following: None

48380 Atop for the Computer Specialist

Training Manager: AMA-405 Course Length: 144 hour(s)

This course is for computer specialists at oceanic centers. The course is 50% lecture and 50% lab. Lecture provides instructor-led classroom training in the operational theory and practical management of the Ocean 21 System including normal operation, monitor and control, problem diagnosis and recovery procedures for the equipment, software, and data that comprise Ocean 21. Lab exercises will serve to reinforce subject matter presented in lecture while providing hands-on experience.

Prerequisites: None
And one of the following: None

48381   Atop Hardware Maintenance

Training Manager: AMA-405 Course Length: 320 hour(s)

This course is for hardw are technicians and SPS personnel at
oceanic centers. The course provides instructor-led classroom and
laboratory training in the operational theory and maintenance of the
Ocean 21 System. This includes normal operation, monitor and
control, problem diagnosis and recovery procedures for the
equipment, softw are, and data that comprise Ocean 21, emphasis on
corrective maintenance procedures for all elements of the system to
LRU level including fault isolation, and diagnosis, problem resolution,
and removal and replacement of FRU and LRU components. Lab
exercises w ill serve to reinforce subject matter presented in lecture
w hile providing hands-on experience.

Prerequisites: None
And one of the following: None

48382   Atop for NAS/NOM's

Training Manager: AMA-405 Course Length: 200 hour(s)

This course is for NAS and NOM personnel at oceanic centers. The
course is 50% lecture and 50% laboratory. Lecture provides
instructor-led classroom training in the operational theory and practical
management of the Ocean 21 System. This includes normal operation,
monitor and control, certification and problem diagnosis and recovery
procedures for the equipment, softw are and data that comprise the
ocean 21 system. Lab exercises w ill serve to reinforce subject
matter presented in lecture w hile providing hands-on experience.

Prerequisites: None
And one of the following: None

48383   Atop Second-Level Engineering

Training Manager: AMA-405 Course Length: 240 hour(s)

This course is for second-level personnel at the William J. Hughes
Technical Center. The course consists of 50% lecture and 50% lab.
Lecture provides instructor-led classroom training in the operational
theory and engineering support requirements of the Ocean 21 System.
 The full range of system functionality is addressed, including all
hardw are, softw are, data and communications components, and the
procedures for advanced problem analysis and resolution. Lab
exercises w ill serve to reinforce subject matter presented in lecture
w hile providing hands-on experience.

Prerequisites: None
And one of the following: None

48384   ARTSIE Stand Alone Tower Display System (SATDS) Maintenance

Training Manager: AMA-405 Course Length: 80 hour(s)

This course provides training for airw ay facilities technicians,
engineers, specialists, and computer operators on the SATDS system
maintenance. The course is 40 hours field-conducted lecture and 40
hours field-conducted laboratory. Lecture subjects include a basic
introduction to SATDS, system theory and operation, system
compontents, and system softw are. Lab subjects include softw are
dow nloading to an SATDS. Alignment and repair of a general digital
flat screen monitor, initializing the MVME 2700 single-board computer,
preventive maintenance, and system troubleshooting.

Prerequisites: 40423
And one of the following: None

48385   Direct Current (DC) Bus System

Training Manager: AMA-405 Course Length: 24 hour(s)

This course provides detailed technical training consisting of the
operation of a Vortex Pow er System. This course is 14 hours lecture
and 10 hours laboratory. Lecture subjects include review of proper
test procedures, adjustments, troubleshooting techniques, and
preventive maintenance. Lab subjects include theory of operation and
application scenarios for the MS1000 Monitoring System.

Prerequisites: None
And one of the following: 44111, 44117, 47600

48531   Precision Runway Monitor (PRM) Hardware Maintenance

Training Manager: AMA-405 Course Length: 160 hour(s)

This course provides training for technicians on the removal and
replacement of the line replaceable units (LRU) for PRM systems.
Subjects cover physical and functional characteristics; theory of
operation; periodic maintenance tasks; corrective maintenance tasks
(including troubleshooting and fault isolation); removal and
replacement procedures for all system LRU's; and procedures for
measuring performance parameters to support system certification.

Prerequisites: None
And one of the following: None

48537   TIMS Overview for TM&O Officers

Training Manager: AMA-405 Course Length: 24 hour(s)

This course provides training on the Telecommunications Information
Management System (TIMS) for personnel w ho require access to
administrative or operational telecommunications data. Lecture
subjects include database structure; development, release, and
deployment status of front-end applications; and general navigation
techniques. Lab includes TQT (TM&O query tool), TFT (financial

tracking), TLC (Lincs CDRL), TOS (ordering system), TCAB (cost allocation and billing), TIS (TM&O information system), and TCT (circuit tracking for operations control centers).

Prerequisites: None
And one of the following: None

48538   TM&O Acquisition and Management Tools

Training Manager: AMA-405   Course Length: 32 hour(s)

Lectures include telecommunication management & operations overview, query tools, ordering system, financial and circuit tracking; provides tools for network planners, budget & performance analysts, communication specialists & circuit engineers to create, manipulate, & track requests; conduct provisioning/circuit tracking activities; & order telecommunications services/equipment. Lab participants apply tools in a simulated environment to create orders, including steps to complete requests for telecommunications services, develop implementation plan, create cost estimates, & complete orders. Students will view/edit/create end-to-end connectivity data to maintain & track inventory.

Prerequisites: None
And one of the following: None

48539   Resident Engineer -Fire Life Safety (FLS)

Training Manager: AMA-405   Course Length: 24 hour(s)

This course provides training for resident engineers who are overseeing FLS upgrades at ATCT's to inspect and accept the installation of fire life safety equipment and related features. Subjects include overview of alternate emergency standards for airport traffic control towers, basic fire protection/life safety codes, systems features, components, and fire protection procedures.

Prerequisites: None
And one of the following: None

48600   Airway Facilities - Collegiate Training Initiative (AF-CTI)

Training Manager: AMA-405   Course Length: 957 hour(s)

This course was created to provide regions with current equivalencies for personnel who have completed the AF-CTI Intern Program (formerly Coop), the upward mobility program or graduates from an approved AF-CTI college who were hired under direct hire authority. Approved colleges have been assessed to prepare employees (current and new) for entry into the FAA Academy's concepts courses. All AF-CTI approved college curricula's certified by FAA Academy personnel. Curriculum (as a min) includes math equivalency to the trig level, electronic theorems, applications in AC and DC circuits (transient analysis, solid state devices, and digital logic theory) and basic computer applications.

Prerequisites: None
And one of the following: None

49033   Microwave Landing System (MLS) FAR-171 Demo (Wilcox)

Training Manager: AMA-405   Course Length: 160 hour(s)

This course provides training on the demonstration FAR-171 MLS produced by Wilcox Electric, Inc. Subjects include MLS concepts, equipment theory, and on-site periodic maintenance and troubleshooting of the MLS to the lowest replaceable unit (LRU).

Prerequisites: 44012
And one of the following: 44415, 44020

49040   DOD/AF Sony/UNIX Introduction

Training Manager: AMA-405   Course Length: 40 hour(s)

This course provides training for DOD personnel on the Sony Digital Display Monitor, DDM2800. The course is 12 hours Academy lecture, 12 hours Academy lab, and 16 hours computer-based exercises (CBE). Lecture subjects include an introduction, system operation, UNIX, and display alignment. Laboratory subjects include alignment, using the digital remote controller, diagnostics, and repair. CBE subjects include training on Sun Solaris.

Prerequisites: None
And one of the following: None

49248   S/390 Hardware Management Console Operation

Training Manager: AMA-405   Course Length: 24 hour(s)

description to be added at a later date.

Prerequisites: None
And one of the following: None

49266   MS-ODL Software/Automation

Training Manager: AMA-405   Course Length: 16 hour(s)

This course provides training for software and automation specialists in the operations and functions of the Multi-Sector Oceanic Data Link (MS-ODL). Lecture and laboratory exercises use the MS-ODL in a simulated environment to cover system overview, software maintenance, and data reduction and analysis.

Prerequisites: None
And one of the following: None

49267   MS-ODL for NAS/NOM and Hardware

Training Manager: AMA-405   Course Length: 24 hour(s)

This course provides training for NAS/NOM and hardw are maintenance specialists in the operation and maintenance procedures required to certify the Multi-Sector Oceanic Data Link (MS-ODL). Lecture and laboratory exercises use the MS-ODL in a simulated environment for system overview , hardw are maintenance, and status monitoring.

Prerequisites: 41705
And one of the following: None

49268   MS-ODL for Computer Operators

Training Manager: AMA-405   Course Length: 12 hour(s)

This contractor developed and administered, field-conducted course is designed to train computer operators in the operation and functions required to perform computer operator duties on the Multi-Sector Oceanic Data Link (MS-ODL). The course consists of classroom lecture and laboratory exercises using the MS-ODL in a simulated environment. Subject matter includes system overview , monitor set-up, and status monitoring.

Prerequisites: None
And one of the following: None

49269   IBM S/390 Parallel Sysplex Operations and Recovery

Training Manager: AMA-405   Course Length: 40 hour(s)

This course provides training for systems performance specialists (SPS), NAS area specialists and operations managers (NAS/NOM), and hardw are maintenance technicians for the Host Computer System. The course is 60% lecture and 40% hands-on exercises and trains the student in the 9672/9674 parallel sysplex environment. The student w ill learn set up and operating procedures for the 9672 hardw are management console (HMC), gain in-depth problem determination skills, practice enhanced sysplex operations including the coupling facility, and utilize recovery capabilities provided by the S/390 parallel transaction server and the 711-based ES/9000.

Prerequisites: None
And one of the following: None

49270   ARSR-1/2 Radar Evaluation

Training Manager: AMA-405   Course Length: 64 hour(s)

This course, w hich has both lecture and lab, w ill cover SSR/DMTI theory of operation, major subassemblies, checks on pow er supply, MDS, RF monitor levels, STC recording and adjustments.

Prerequisites: None
And one of the following: None

49271   FPS-20 Radar Evaluation

Training Manager: AMA-405   Course Length: 64 hour(s)

This course, w hich has both lecture and lab, w ill cover SSR/DMTI theory of operation, major subassemblies, checks on pow er supply, MDS, RF monitor levels, and STC recording and adjustments.

Prerequisites: None
And one of the following: None

49303   Sun System Fault Analysis Workshop

Training Manager: AMA-405   Course Length: 40 hour(s)

This course is for ATSSS having maintenance responsibility for one of the assigned prerequisites. This course covers how to differentiate and repair selected hardw are; system administration and softw are problems; use of an organized total system approach for fault analysis; isolate and repair selected netw ork; and port and printer faults. It also covers recognition and repair system administration problems and mistakes; and how to use SunsolveTM and other Sun fault-isolation facilities. It teaches how to recognize and patch selected operating system (OS) problems; load, execute, and interpret system error messages; and analyze system dumps, crashes, and hangs.

Prerequisites: 49302
And one of the following: 40441, 40432, 47428

55059   OSHA 29CRF 1960.20, Emergency Exit Routes in ATC Towers

Training Manager: ANS-500   Course Length: 2 hour(s)

This vendor-developed course provides training for air traffic control and airw ay facilities personnel on requirements for ATC tow ers w ith one means of exit. The course consists of a lesson plan including handouts, train-the-trainer w orkbook, employee handbook, video-based training, and end-of-lesson test.

Prerequisites: None
And one of the following: None

64000   (IVT) NAS Overview for MCC Specialists

Training Manager: AMA-480   Course Length: 40 hour(s)

This course provides breadth training for technicians, engineers, and NAS managers on the National Airspace System. The course is 100% interactive-video teletraining. Subjects include the functional and operational characteristics of equipment, systems, and services w hich comprise the NAS, including emphasis on interrelationships and

dependencies of NAS systems and services.

Prerequisites: None
And one of the following: None

88000   C1 - Basic Communications Equipment

Training Manager: AMA-410   Course Length: 2 hour(s)

Bypass for 47504. Open book. Study reference is manual 47504. The exam covers audio principles, control systems, transmitters, and receivers.

Prerequisites: None
And one of the following: None

88007   Recorders (C2)

Training Manager: AMA-410   Course Length: 1 hour(s)

Bypass exam for 44006. Open book. Study References are Manufacturer's Instruction Manual and Manual 44006. The exam covers tape-drive systems, record and reproduce head theory, general recording theory, magnetic erasure, magnetic bias, and magnetic theory.

Prerequisites: None
And one of the following: None

88009   Runway Visual Value (RVV)

Training Manager: AMA-420   Course Length: 1 hour(s)

Bypass for 40213. Open book. Study reference is manual 40252-1. The exam covers transmissometer projector, receiver amplifier, and graphic recorder.

Prerequisites: None
And one of the following: None

88011   UVDF (Doppler DF) (C6)

Training Manager: AMA-410   Course Length: 3 hour(s)

The exam covers vacuum tube concepts, receiver fundamentals, antenna principles, indicator principles, dopler theory, and binary counter concepts.

Prerequisites: None
And one of the following: None

88014   RVR (SSR, FA-7861) (C8)

Training Manager: AMA-420   Course Length: 2 hour(s)

The exam covers signal data converter and indicator. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88016   BUEC Remote Site (C10)

Training Manager: AMA-410   Course Length: 3 hour(s)

The exam covers control circuits and BUEC transceivers. This exam is for mailout or on-line use only.

Prerequisites: None
And one of the following: None

88017   BUEC - ARTCC (C11)

Training Manager: AMA-410   Course Length: 2 hour(s)

Bypass for course 47501. Closed book. Study References are manufacturer's instruction manual, manual 47501, and manual 47500. The exam covers remote control group, tone generator, remote link tester, and audio transfer.

Prerequisites: 88016
And one of the following: None

88018   HCVR (C12)

Training Manager: AMA-410   Course Length: 3 hour(s)

Bypass for courses 40016 and 45005. Closed book. Study References are MIB; manuals 40016-1, 40016-2, 40016-3; manual 43663; manual 44416; and manual 44417. The exam covers the theory of operation of the high capacity voice recorder (HCVR).

Prerequisites: None
And one of the following: None

88022   Tasker 500 RVR (Computer Only) (C15A)

Training Manager: AMA-420   Course Length: 3 hour(s)

The exam covers logic circuits, signal data converter, alarm circuits, and pow er supplies. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88023   Low-Level Wind Shear Alert System (C16)

Training Manager: AMA-420   Course Length: 2 hour(s)

The exam covers general system concepts, central station, remote station, tower display, and schematic reading. This exam is available mailout and online.

Prerequisites: None
And one of the following: None

88024   VHF Direction Finder FA-9964 (C17)

Training Manager: AMA-410 Course Length: 2 hour(s)

Bypass for course 40257. Open book. Study reference is manual 40257. The exam covers system gain, system orientation, remote unit and operation, local unit, antenna, and built-in test equipment (BITE).

Prerequisites: None
And one of the following: None

88025   Magnasync/Moviola High Capacity Voice Recorder

Training Manager: AMA-410 Course Length: 2 hour(s)

Bypass for 43010. Closed book. Study references are specialist operation and maintenance instruction manuals and specialist master synchronizer operation instruction manual. The exam covers the theory of operation, preventive, and corrective maintenance procedures of 60-channel Magnasync High Capacity Voice Recorder.

Prerequisites: None
And one of the following: None

88026   Low-Level Wind Shear Alert System Climatronics

Training Manager: AMA-420 Course Length: 2 hour(s)

Bypass for 47712. Closed book. Study references are 6560.13B Section II, Weather Equipment Maintenance Order and 6560.16 Manufacturer Instruction Book (MIB). The exam covers all phases of the LLWAS system including central control unit, remote station, local controller display, centerfield wind display, anamometer.

Prerequisites: None
And one of the following: None

88032   Statistical Multiplexers

Training Manager: AMA-470 Course Length: 2 hour(s)

This exam covers the theory of operation and preventative and corrective maintenance procedures for the DCX-808.

Prerequisites: None
And one of the following: None

88033   Direct Access Radar Channel (DARC) Operations

Training Manager: AMA-470 Course Length: 2 hour(s)

This exam covers an overview of DARC.

Prerequisites: None
And one of the following: None

88034   RCL System Terminal and Repeater Common Equipment (C27)

Training Manager: AMA-440 Course Length: 5 hour(s)

This exam covers the concepts, operation, and maintenance of the electronic assemblies and subassemblies that are utilized at both RCL terminal and repeater facilities, to include an introduction/overview of the RCL system, the AT&T Lineage 2000 power plant, the Granger Direct-To-Line (DTL) 7300 Multiplexing System, the AT&T FR8 Microwave Radio System, the RCL orderwire/ANMS service channel equipment, and the AT&T Acorn network control system satellite telemetry unit.

Prerequisites: None
And one of the following: None

88035   ICSS Type II Litton (C28)

Training Manager: AMA-410 Course Length: 4 hour(s)

This concepts exam covers the theory of operation of all major subsystems of the Litton Type II ICSS. Subject areas covered by the exam include terminology/calling procedures, position modules, module controller, TDM concepts, common controller, position controller (POSCO), radio controller (RADCO), RTQC/FDE/MUX/MRT, Telco terminology, trunk controller (TRUCO), and monitor controller.

Prerequisites: None
And one of the following: None

88038   ICSS Model 3080 RDVS (C31)

Training Manager: AMA-410 Course Length: 2 hour(s)

This concepts exam covers the theory of operation of the Litton Rapid Deployment Voice Switch (RDVS). Subject areas covered by the exam include terminology familiarization and calling procedures, position modules, module control unit (MCU), power distribution, common elements, position control unit (PCU), radio control unit (RCU), Telco terminology, trunk control unit (TCU), and QCT/CCT.

Prerequisites: None
And one of the following: None

88040   VSCS Hardware Test 1 (C33A)

Training Manager: AMA-410   Course Length: 8 hour(s)

This is the first of 3 exams that cover the Voice Switching and Control Subsystem (VSCS) Hardware, Type FA-10500. Satisfactory completion of all 3 exams is required to bypass course 40272 or 48171. Subjects covered in this exam include system architecture, maintenance position equipment subsystem operation, and control subsystem DMC operation and maintenance.

Prerequisites: 47012, 44012
And one of the following: 44013, 44020

88041   VSCS Hardware Test 2 (C33B)

Training Manager: AMA-410   Course Length: 8 hour(s)

This is the second of 3 exams that cover the voice switching and control subsystem (VSCS) hardware, type FA-10500. Satisfactory completion of all 3 exams is required to bypass Course 40272 or 48171. Subjects covered in this exam include switching subsystem architecture, switching subsystem preventive and corrective maintenance, and system interconnect subsystem configuration and maintenance.

Prerequisites: 47012, 44012
And one of the following: 44013, 44020

88042   VSCS Hardware Test 3 (C33C)

Training Manager: AMA-410   Course Length: 8 hour(s)

This is the third of 3 exams that cover Voice Switching and Control Subsystem Hardware, Type FA-10500. Satisfactory completion of all 3 exams is required to bypass course 40272 or 48171. Subjects covered in this exam include VCET hardware, VSCS operational procedures, system-level troubleshooting, and Tandem.

Prerequisites: 47012, 44012
And one of the following: 44013, 44020

88043   Radio Control Equipment (C34)

Training Manager: AMA-410   Course Length: 3 hour(s)

This exam covers the radio control equipment (RCE) produced by CSTI. The exam covers RCI function, operational modes P1 addressing, front panel, monitor jacks, rdvsel, P1 and P2 cables, I/O mapping, MOT menu items and passwords, files, PVC, slots/nodes, run-time database, query messages, configuration files, troubleshooting, CMS overview and precedence.

Prerequisites: None
And one of the following: None

88044   VSCS Overview Test 1 (C35A)

Training Manager: AMA-410   Course Length: 4 hour(s)

This exam, with test 2, tests theory of operations on the VSCS Communications Equipment Type FA-10500. Subject areas include electrostatic discharge, VSCS System manual, VSCS System architecture, computer software configuration items, maintenance concepts and work station operation, monitor system status, fault isolation, reconfiguration, voice channel testing, tape management, and user interface operations. See AF ECC Catalog for Study References. CBI terminal with VSCS electro-static discharge (ESD) courseware is available. Both exams must be completed satisfactorily to be equivalent to course 40289.

Prerequisites: 44012, 47012
And one of the following: 44013, 44020

88045   VSCS Overview Test 2 (C35b)

Training Manager: AMA-410   Course Length: 4 hour(s)

This exam, with test 1, tests theory of operations on the VSCS Communications Equipment, Type FA-10500. Subject areas include user interface operations; A/G operations; G/G operations; VDM utilities screen and functions; map build design and database theory; VSCS System reconfiguration; supervisory recorder operations; general operational procedures, equipment controls and indicators; system startup and shutdown; VSCS system-level troubleshooting concepts; and monitor system status. See AF ECC Catalog for study references. CBI terminal with VSCS Electro-Static Discharge (ESD) courseware is available. Both exams must be completed satisfactorily to be eqivalent to course 40289.

Prerequisites: 44012, 47012
And one of the following: 44013, 44020

88046   VSCS Site Software Maintenance Test 1 (C36A)

Training Manager: AMA-410   Course Length: 4 hour(s)

This exam, with tests 2 and 3, tests theory of operation on the Voice Switching and Control System (VSCS) site software. Subject areas include physical and functional characteristics and subsystem interrelationships, software architecture, control subsystem, various Tandem capabilities and functions, Guardian 90 operations, Tandem CLX computer operations and concepts, and computer system problem resolution methodologies. See AF ECC Catalog for study references. CBI terminal with VSCS Electro-Static Discharge (ESD) courseware is required. All three exams must be completed satisfactorily to be equivalent to coure 40273.

Prerequisites: 44012, 47012
And one of the following: 44013, 44020

88047   VSCS Site-Software Maintenance Test 2 (C36B)

Training Manager: AMA-410   Course Length: 4 hour(s)

This exam, with tests 1 & 3, test theory of operations on the VSCS site software. Subject areas include TMF hardware and components; system management functions; Tandem hardware/software architecture and Tandem system management functions; common operations tasks; tack features; software decomposition; on-line processing; CSCI-6 components; subvolumes and files; TMF database protection; Tandem file and disk management functions; Sysgen requirements and procedures; TACL directories and segments. See AF ECC Catalog for study references. CBI terminal with VSCS Electro-Static Discharge (ESD) courseware is required. All three exams must be completed satisfactorily to be equivalent to 40273.

Prerequisites: 44012, 47012
And one of the following: 44013, 44020

88048   VSCS Site Software Maintenance Test 3 (C36C)

Training Manager: AMA-410   Course Length: 4 hour(s)

This exam, w/tests 1 & 2, test the theory of operations on the VSCS site software. Subject areas include site and depot-level maintenance actions; voice channel testing; logon/logoff operations; various status screens; system event messages/fault characteristics; le mode transitions; A/G switchover; fault isolation and reconfig; tape maintenance functions; position functionality; troubleshooting procedures; facility reconfig; system config database; system startup/shutdown; and software processes/exceptions. see AF ECC Catalog for Study References. CBI terminal w/VSCS electro-static discharge courseware required. All 3 examS must be completed satisfactorily to be equivalent to 40273.

Prerequisites: 44013, 44012, 47012
And one of the following: None

88049   Enhanced Tower Voice Switch (ETVS) (C37)

Training Manager: AMA-410   Course Length: 3 hour(s)

This exam covers the Enhanced Tower Voice Switch (ETVS) System to include position modules, position operation, system busses, block diagrams, central rack cards, power system, configuration and control system, SCT operation, system troubleshooting, and card alignment.

Prerequisites: None
And one of the following: None

88100   Electrical Principles (E1)

Training Manager: AMA-430   Course Length: 3 hour(s)

The exam covers magnetic theory; current, voltage, and power; resistance; AC; rectifier, battery and generator; transformers; relays; P factor and phase; and national electric code. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88102   Diesel Engine Generator, 550 KW (E2)

Training Manager: AMA-430   Course Length: 2 hour(s)

This exam is for personnel responsible for the operation, maintenance, and evaluation of 550KW diesel engine generators. It contains evaluation of the following subjects: EGB-10C hydraulic governor, safety devices, lubrication, fuel and injector system, alternator, starting air, intercooler, and intake/exhaust system. This exam is mailout only

Prerequisites: None
And one of the following: None

88104   ALS (E4)

Training Manager: AMA-430   Course Length: 4 hour(s)

The exam covers visual landing aids systems. It is subdivided as follows: general theory, 20 questions; Hevi duty also substation, 10 questions; Westinghouse ALS substation, 10 questions; and GE ALS substation, 10 questions. This exam is for mailout or on-line use.

Prerequisites: 88100, 88103
And one of the following: None

88105   VASI (E5)

Training Manager: AMA-430   Course Length: 4 hour(s)

The exam covers maintenance and installation of VASI Systems FA-I01-A, FA-8148, FA-9330, FA-9458, FA-9458A, and FA-9458B. This exam is for mailout or on-line use.

Prerequisites: 88100
And one of the following: None

88107   MALSR/RMS and REIL/RMS (E11)

Training Manager: AMA-430   Course Length: 3 hour(s)

This exam tests theory of operations of the MALSR with Remote Monitoring Subsystem (RMS) (MALSR-AVW, Type FA-10290) and the REIL with RMS (REIL-DME, Type FA-10264). Subject areas include FAA Order 6850.5C, REIL components (individual control cabinet, control cabinet monitor, RMS, intensity control, and trigger generation) and MALSR components (individual control cabinet, intensity control, trigger generation, and RMS).

Prerequisites: 47001
And one of the following: 44111, 47600

88108   Exide Uninterruptible Power Supply (UPS) (E8)

Training Manager: AMA-430   Course Length: 2 hour(s)

The exam covers theory of the Exide UPS inverter, rectifier/charger, static switch, battery bank, interface panels, logic boards, and operating procedures. This exam is online only.

Prerequisites: 88100
And one of the following: None

88112   Dual Mode ALSF-II (Godfrey) (E10)

Training Manager: AMA-430   Course Length: 4 hour(s)

The exam covers concepts of dual mode approach light systems, equipment installation, adjustment procedures, maintenance practices, system circuit analysis, the high voltage input and output cabinets, constant current regulators, system controls, monitors, and the sequenced flashing lights.

Prerequisites: None
And one of the following: None

88113   Kohler Power Systems, Text 1 (E12a)

Training Manager: AMA-430   Course Length: 2 hour(s)

This exam, with test 2, tests theory of operation on the Kohler engine generators, controllers and accessories.

Prerequisites: 40127
And one of the following: 47600, 44111

88114   Kohler Power Systems, Test 2 (E12B)

Training Manager: AMA-430   Course Length: 2 hour(s)

This exam, with test 1, tests theory of operation on the Kohler engine generators, controllers and accessories.

Prerequisites: 40127
And one of the following: 47600, 44111

88115   Environmental Electrical Concepts (E13)

Training Manager: AMA-430   Course Length: 3 hour(s)

This exam covers safety, concepts of electricity/magnetism, batteries, electrical conductors, alternating current and vector analysis, basic electrical indicating instruments, transformers, generators, motors, control devices and circuit diagrams, and magnetic amplifiers.

Prerequisites: None
And one of the following: None

88117   ACEPS Standby Power and Distribution System (E15)

Training Manager: AMA-430   Course Length: 8 hour(s)

This exam covers the ACEPS equipment in the areas of engine generators, control panels, GE/Basler/Woodward control devices, circuit breakers, switchgear, and areas involved with PCMS and 48 VDC control.

Prerequisites: 45510, 47112
And one of the following: None

88118   ACEPS Critical Distribution System (E16)

Training Manager: AMA-430   Course Length: 6 hour(s)

This exam covers the ACEPS equipment in the areas of Exide UPM's, Bypass tTransfer and Control System (BTCS), UPS supply BUS, critical BUS, CPC's and batteries.

Prerequisites: 45510, 47112
And one of the following: None

88208   Markers/Homers (N4)

Training Manager: AMA-420   Course Length: 1 hour(s)

The exam covers transmission line concepts, coupled circuit theory, transmitter principles, and antenna and radiation pattern concepts. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88217   VOT Only (N10)

Training Manager: AMA-420   Course Length: 1 hour(s)

The exam covers VOT principles, VOT transmitter, monitoring system, and flight inspection. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88218   VOR-VOT (Tube Type) (N11)

Training Manager: AMA-420   Course Length: 4 hour(s)

The exam covers reference signal components; variable signal components; control, voice and identification; VOR monitor and test generation; VOR course; ground check principles, FI and ground check; and antennas and radiation pattern concepts. This exam is for mailout or on-line use.

Prerequisites: 88252
And one of the following: None

88223   ILS, AIL Mark IB Marker Beacon Station FA-8603 (N16)

Training Manager: AMA-420   Course Length: 4 hour(s)

The exam covers antennas, transmitters, regulator-keyer, audio-monitor, pow er supply, auto-reset board, and maintenance order.

Prerequisites: 88220
And one of the following: None

88226   DME, Butler 1020 and Wilcox 595/596 (N19)

Training Manager: AMA-420   Course Length: 3 hour(s)

This exam covers the theory of operation of Butler (Wilcox) DME. It also covers adjustment of DME w ith correct standard and tolerance settings. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88227   ILS, Capture Effect GS (N20)

Training Manager: AMA-420   Course Length: 2 hour(s)

The exam covers capture effect theory, clearance transmitter, radiation patterns, amplitude phase and control unit. Proximity error, and monitoring. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: 88223, 88222, 88224, 88221

88233   DME Cardion (FA-8974) (N26)

Training Manager: AMA-420   Course Length: 2 hour(s)

This exam evaluates know ledge of DME operating characteristics, input/output signed characteristics, and fault analysis. This exam is for mailout and on-line use.

Prerequisites: None
And one of the following: None

88234   ILS, Mark 1D/E/F Localizer (N27)

Training Manager: AMA-420   Course Length: 3 hour(s)

This exam covers ILS LOC Systems. Subjects include RF generation, transmission and radiation, LOC-Periodic Antenna System, monitoring pow er supply, control unit, and flight inspection. This exam is for mailout or on-line use.

Prerequisites: 88220
And one of the following: None

88235   ILS, Mark 1D/E/F Null Ref GS (N28)

Training Manager: AMA-420   Course Length: 3 hour(s)

This exam covers null reference glideslope ICS systems. Subjects include RF generation, transmission and radiation, NRGS Antenna System, monitoring, pow er supply control unit, and flight inspection. This exam is for mailout or on-line use.

Prerequisites: 88220
And one of the following: None

88236   ILS, Mark 1D MKR Beacon (N29)

Training Manager: AMA-420   Course Length: 3 hour(s)

This exam covers the mark 1D Marker Beacon System. Subjects include pow er supply, transmitter, antenna/radiation patterns, monitor/control, alignment, flight inspection, and troubleshooting. This exam is for mailout or on-line use.

Prerequisites: 88000
And one of the following: None

88237   ILS, Mark 1D Remote Monitoring (N30)

Training Manager: AMA-420   Course Length: 3 hour(s)

This exam covers the Mark 1D remote monitor receiver. Subjects include RF/IF amplifiers, audio circuits, alarm detector, aural/visual alarm indications, alignment, and troubleshooting. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88238   DME Cardion (FA-9639) (N31)

Training Manager: AMA-420   Course Length: 2 hour(s)

The exam covers system concepts, logic symbols, receiver 1A1A13, exciter, decoder, 1A1A7, encoder 1A1A6, pulse shaper 1A1AB, and transmitter 1A1A15. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88240 ILS Sideband Reference Glideslope (Tube Type)(N33)

Training Manager: AMA-420 Course Length: 2 hour(s)

The exam covers rf patterns, RF phasing, monitoring, modulator, and dd. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88241 VOR Cardion Solid State (N34)

Training Manager: AMA-420 Course Length: 3 hour(s)

The exam covers the operating concepts of Cardion solid state VOR, including operating parameters and input/output signal characteristics of equipment modules. The exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88242 VORTAC FA-9996 Second Generation (N35)

Training Manager: AMA-420 Course Length: 6 hour(s)

The exam covers solid state VOR and TACAN; battery charger power supply; facility central processing unit; controlling, certifying, and fault isolation of VORTAC from IOT remote station; and RMC-150 and TRA-2 antenna speed. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88243 DME Cardion FA-9783 (N36)

Training Manager: AMA-420 Course Length: 3 hour(s)

The exam covers theory of operation of the transponder, monitor, control and transfer assembly, and remote monitor. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88247 Double Side-Band Doppler VOR (N40)

Training Manager: AMA-420 Course Length: 3 hour(s)

This exam tests knowledge of doppler VOR radiation patterns, modulation percentage, and equipment operation. Subjects include vector analysis of radiation patterns, evaluation of block diagrams, and circuit diagrams. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88248 Microwave Landing System (MLS) Concepts (N41)

Training Manager: AMA-420 Course Length: 1 hour(s)

The exam covers microwave channel allocations, signal format, angle function, phase synchronization, scanning beam angle antennas, basic/auxiliary data, sector coverage, and monitoring system. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88253 Low Power TACAN Antenna (LPTA) (N51)

Training Manager: AMA-420 Course Length: 2 hour(s)

This exam tests theory of operation of the Low Power TACAN Antenna System, Type FA-10369. Subjects include TACAN azimuth review, LPTA assembly and system characteristics, subassemblies controls and indicators, power up/power down and vibration, antenna on control logic, power supplies distribution and control, motor drive and speed control, north alignment, course rotation, 15/135/1350 Hz trigger generation, bit circuits and indicators, troubleshooting, RF power distribution and radiation pattern, and high/low band columns.

Prerequisites: **47701**
And one of the following: None

88254 VHF Omni-Range Test Facility (N47)

Training Manager: AMA-420 Course Length: 2 hour(s)

This exam tests knowledge of the VHF omni-range test facility. Subjects include VOT system general theory, unit operation, LRU schematic level operation and procedures required to maintain, troubleshoot, and repair the VOT system to the LRU replacement level.

Prerequisites: None
And one of the following: None

88255 Mark 20 Instrument Landing System (ILS) (N50)

Training Manager: AMA-420 Course Length: 8 hour(s)

This theory of operations exam covers the Wilcox Mark 20 ILS and consists of system, portable ILS receiver, maintenance data terminal, marker beacon, localizer, Farfield monitor, glideslope, remote indication and control equipment, and link control unit (LCU).

Prerequisites: None
And one of the following: 40233, 40283

Prerequisites: None
And one of the following: None

88256   DME Concepts (N49)

Training Manager: AMA-420 Course Length: 2 hour(s)

This exam covers DME principles, including transponder, DME terminology and nomenclature, and DME system functions, including video processor, decoder, encoder, signal generator, and monitors. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88257   ILS Theory of Operations (N52)

Training Manager: AMA-420 Course Length: 3 hour(s)

This exam test theory of operations for instrument landing systems (ILS). Subjects include ILS localizer, ILS glideslope, marker beacon, ILS system, amplitude modulation, space modulation, difference in depth of modulation, radiation patterns, ILS waveforms, and transmission lines.

Prerequisites: None
And one of the following: None

88258   Navigation Systems Concepts (N53)

Training Manager: AMA-420 Course Length: 6 hour(s)

This exam tests the concepts and principles relating to the operation of ground-based VOR, DME, and TACAN transmitters, receivers, and monitoring systems. The exam includes calculations involving transmission lines, antenna radiation patterns, modulation, frequency, power, gain, duty cycle, transformers, range measurements, and bearing, as well as VOR bridge adjustments and course error graphing and analysis. VOR ground check graphs and four formula sheets are required (obtain these from examination control center).

Prerequisites: None
And one of the following: None

88259   VOR Principles (N54)

Training Manager: AMA-420 Course Length: 4 hour(s)

This exam tests the concepts and principles relating to the operation of ground-based VOR transmitters and monitoring systems. The exam includes calculations involving transmission lines, antenna radiation patterns, modulation, frequency, power, and bearing, as well as VOR bridge adjustments and course error graphing and analysis. VOR ground check graphs and three formula sheets are required (obtain these from the Examination Control Center).

88260   TACAN Principles (N55)

Training Manager: AMA-420 Course Length: 4 hour(s)

This exam tests the concepts and principles relating to the operation of ground-based TACAN transmitters and monitoring systems. The exam includes calculations involving transmission lines, antenna radiation patterns, modulation, frequency, power, gain, duty cycle, transformers, range measurements, and bearing. Three formula sheets are required (obtain these from the Examination Control Center).

Prerequisites: None
And one of the following: None

88261   LLWAS-RS, Type FA-14100 (N56)

Training Manager: AMA-420 Course Length: 2 hour(s)

This exam covers the LLWAS-RS in the areas of system concepts, major and subassembly identification, communication functions, system displays, functional characteristics, signal flow, software applications, operation checks, removal and replacement procedures, preventive maintenance, and system restoration.

Prerequisites: 47504
And one of the following: 44013, 44020

88317   ASR-7 (R13)

Training Manager: AMA-450 Course Length: 3 hour(s)

The exam covers trigger timing, transmitter system, receiver, digital processor, MTI, video processing, azimuth system, and control circuits. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: 40392, 42058, 88346, 88360

88319   ATCBI-4 (R15)

Training Manager: AMA-440 Course Length: 4 hour(s)

The exam covers system-operation concepts, test set, pulse-mode generator concepts, control concepts, pulse-mode generator fault analysis, control circuits, TX/RX, monitor, digital defruiter fault analysis, and digital defruiter concepts.

Prerequisites: None
And one of the following: 40392, 42058, 88346, 88360

88324 Airport Surveillance Radar (ASR-9) Hardware (R20)

Training Manager: AMA-450   Course Length: 4 hour(s)

Bypass for 40337. The exam covers introduction, RMS/system control, synchronizer, transmitter, receiver, post processor, SCIP, and modems/antennas. Reference material required for this examination includes: 1) TI 6310.24, ASR-9 System; 2) TI 6310.25, Transmitter; 3) TI 6310.26, Target and 2LVL WX Receiver Processor; 4) TI 6310.27, Remote Monitoring Subsystem;' 5) TI 6310.28, 6LVL WX receiver Processor SCIP; 6) TI 6310.29, Maintenance PPI; 7) TI 6310.30, Antenna System; and 8) TI 6310.31, Remote/Dual Remote SCIP.

Prerequisites: None
And one of the following: 42058, **40392**, **88346**, **88360**

88331 Digital Defruiter (R27)

Training Manager: AMA-450   Course Length: 4 hour(s)

The exam covers the operation of the MX-8757 Digital Defruiter. this exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88333 ARSR-1/2 (R29)

Training Manager: AMA-440   Course Length: 4 hour(s)

The exam covers the fundamental concepts required for the operation, maintenance, and repair of the ARSR 1/2 radar system. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88334 SSVM (R30)

Training Manager: AMA-450   Course Length: 2 hour(s)

The exam covers the operation of the GPA-131 FA 8049 and FA-8970 types of solid state video mapper. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: 42058, **40392**, **88346**, **88360**

88335 ATCBI-5 (R31)

Training Manager: AMA-440   Course Length: 3 hour(s)

The exam covers the operation of the ATCBI-5 Beacon System. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88336 ASR-8 (R32)

Training Manager: AMA-450   Course Length: 5 hour(s)

The exam covers the operation of the ASR-8 terminal radar. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: 42058, **40392**, **88346**, **88360**

88345 DBRITE System (R41)

Training Manager: AMA-460   Course Length: 4 hour(s)

This exam covers theory on digital scan converter, power supply and junction box, display and inter-related control functions. Study references: 1) TI 6410.18, Operation and Maintenance Instructions, DBRITE System; 2) TI 6410.21, Operation and Maintenance Instructions, DBRITE Display.

Prerequisites: None
And one of the following: None

88349 ASR-9 Remote SCIP (R45)

Training Manager: AMA-450   Course Length: 4 hour(s)

This examination covers the theory on ASR-9 remote surveillance communications interface processor (SCIP) and ASR-9 modems. Study references are TI 6310.24, ASR-9 System, and TI 6310.31, ASR-9 remote/dual remote SCIP.

Prerequisites: None
And one of the following: 42058, **40392**, **88346**, **88360**

88350 Mode-S System (R46)

Training Manager: AMA-450   Course Length: 4 hour(s)

This test covers all phases of the Mode-S system including terminal usage, Mode-S/ATCRBS interrogations, Mode-S/ATCRBS replies, transmitter, receiver, DPS, signal processor, toy clock, CPME, different modes of operation, RTADS, PLOTASR, TDR data reduction tools, system status, and system troubleshooting.

Prerequisites: 44020
And one of the following: 42058, **40392**, **88346**, **88360**

88353 Solid State Radar Beacon Decoder (SSRBD) (R49)

Training Manager: AMA-440   Course Length: 2 hour(s)

This exam covers the installation, evaluation, and maintenance of the SSRBD equipment. Subject areas include system concepts, control circuits, pow er supplies, and line replaceable units (LRU).

Prerequisites: None
And one of the following: None

88355   FPS Transmitter (R51)

Training Manager: AMA-440   Course Length: 3 hour(s)

Exam covers the operation of the FPS radar. Subject areas include: the modulator; HV rectifier; RF cabinet; PA cabinet; and pow er distribution. Study references include course material for 40399 and technical instruction books for any FPS series radar.

Prerequisites: None
And one of the following: 40392, 42058, 88360

88356   SSR/DMTI Type 2/3 (R52)

Training Manager: AMA-440   Course Length: 3 hour(s)

This exam covers the fundamental concepts required for operation, maintenance, and performance of the diagnostic procedures of the SSR/DMTI modification to the FPS-20 series radar.

Prerequisites: None
And one of the following: 40392, 42058, 88360

88357   ARSR 1/2 With SSR/DMTI Type 1 (R53)

Training Manager: AMA-440   Course Length: 4 hour(s)

This exam covers the fundamental concepts required for the operation, maintenance, and performance of the diagnostic procedures of the ARSR 1/2 Radar System w ith SSR/DMTI modification.

Prerequisites: None
And one of the following: 40392, 42058, 88360

88358   ARSR-3 With 3LW and RMM (R54)

Training Manager: AMA-440   Course Length: 8 hour(s)

This concepts exam covers introduction to the Air Route Surveillance Radar (ARSR)-3 System, maintenance display, Planar Array Test Set, transmitter, receiver, control panels, digital target extraction, output processor, receiver interface control, built-in test equipment, and remote maintenance monitoring.

Prerequisites: 42058
And one of the following: 40339, 47706

88359   Radio Communications Link System Terminal Equipment (R55)

Training Manager: AMA-440   Course Length: 40 hour(s)

This exam covers concepts, operation and maintenance of electronic assemblies and subassemblies that are utilized only at RCL system air route traffic control center (ARTCC) and junction area control facility (ACF) high-density terminal facilities, to include overview of the RCL ARTCC/ACF high-density terminal equipment, the Coastcom channel bank, the Fairchild M505M microw ave modem, engineering change proposal (ECP) 027 support equipment, and the AT&T Acorn Netw ork Control System.

Prerequisites: None
And one of the following: None

88360   Modern Radar Concepts (R56)

Training Manager: AMA-450   Course Length: 3 hour(s)

This exam tests the concepts and principles of modern radar. Subjects include primary radar, transmission lines and w aveguide components, antenna systems, factors affecting performance, modern synchronizer functions, high voltage modulators, high pow er RF output devices, transmitter troubleshooting techniques, radar receivers, phase detection processing, interfacing type and methods, display systems, and beacon systems.

Prerequisites: None
And one of the following: None

88361   Full STARS Maintenance (R57)

Training Manager: AMA-490   Course Length: 2 hour(s)

This exam covers the STARS Automation System. Subject areas include local area netw ork maintenance, radar data interface and display, UNIX   familiarization, SOS operation, flight data interface and display, continuous data recording, system timing, Sony monitor, system administration and security, softw are management, and fault isolation and repair.

Prerequisites: 88440, 88441
And one of the following: 12751, 40423

88401   Coded Time Source (D2)

Training Manager: AMA-480   Course Length: 2 hour(s)

This exam covers analysis and alignment of the coded time source system. Included are system w ide logic level determination as w ell as functional analysis of the various sections of the overall coded time source system. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88414 Sensor RCVR and Processor (SRAP) (D15)

Training Manager: AMA-460   Course Length: 3 hour(s)

The exam covers micro-controller, radar extractor, BDAS, diagnostics, and operational firmware. This exam is mailout only.

Prerequisites: None
And one of the following: None

88417 ARTS IIIA Data Entry Display System (DEDS) (D18)

Training Manager: AMA-460   Course Length: 3 hour(s)

The exam covers the theory of operation of the data entry and display subsystem (DEDS), and the theory of operation of the multiplexed display buffer memory (MDBM), as well as the diagnostic program for MDBM/DEDS. This exam is for mailout or on-line use.

Prerequisites: None
And one of the following: None

88420 Peripheral Adapter Module Replacement Item (PAMRI)

Training Manager: AMA-470   Course Length: 2 hour(s)

This exam covers operational aspects of the PAMRI hardware and software configurations, operational requirements, and parameters; the HOST computer; PAMRI systems and channel interfaces; and PAMRI system data analysis, problem determination, and resolution. Study References: PAMRI hardware technical manuals volumes I, II, and III, PAMRI RAPPI operators' manual PU02 8/15/91, and PAMRI remote RAPPI operators' manual PU02 11/30/92.

Prerequisites: None
And one of the following: None

88421 Computer Update Equipment (CUE) (D22)

Training Manager: AMA-470   Course Length: 0 hour(s)

Prerequisites: None
And one of the following: None

88425 EARTS Data Acquisition Subsystem (EDAS) (D-26)

Training Manager: AMA-460   Course Length: 4 hour(s)

A 4-hour exam that covers the theory of operation, maintenance procedures, and diagnostics for the communication multiplex controller (CMC), console data terminal (CDT), subsystem real time clock (RTC), and magnetic-tape subsystem.

Prerequisites: None
And one of the following: None

88428 Dictaphone Model 5000 (D29)

Training Manager: AMA-410   Course Length: 2 hour(s)

The exam covers system components and configurations, operating procedures, theory of operation, servicing-alignment/calibration, and troubleshooting. This exam is for mailout or online use.

Prerequisites: None
And one of the following: None

88430 Host Computer System (HCS) Enhanced Computer Opr Trng

Training Manager: AMA-470   Course Length: 5 hour(s)

This exam covers problem determination and isolation of hardware and software errors. Hardware includes processor subsystem and peripheral devices. Software programs covered are NAS, VM, and MVS. Emphasis is on reconfiguration of resources and recovery from errors and problems, to ensure NAS integrity. Study References are: GC38-0035; GC38-0036; B095-II, B095-V; SC19-6225; SC19-6227; SC19-6226; GC28-1378; GC28-0984; GC281354; GC28-1374; GC28-1375, and SC23-0048. For a complete description of study references, see AF ECC Catalog in CYBIS.

Prerequisites: None
And one of the following: None

88431 Radar Data Acquisition Subsystem

Training Manager: AMA-480   Course Length: 2 hour(s)

This exam covers the fundamental concepts of primary and secondary radar systems, digitizing equipment, IMCS functions relating to radar system monitoring by NAS/NOM specialists at an ARTCC. Other areas include radar-related message processing by the HOST and DARC as well as radar-related message data flow at the ARTCC. Concepts and interpretation of RDAS analysis tools available to the NAS/NOMS are also covered. Study References: all manuals for the resident Course 43009, RDAS plus: RDAS--General Information and Documentation Guide, FAA-4006-2H; NAS-MD-320, Multiple Radar Data Processing; and NAS-MD-322, Real Time Quality Control of Radar Data.

Prerequisites: None
And one of the following: None

88434 DSR Hardware Test 1 (D35A)

Training Manager: AMA-470   Course Length: 6 hour(s)

This exam tests know ledge of the IBM RISC 6000 Display System Replacement (DSR) Hardw are System for ARTCC's, including theory, error indications, troubleshooting, testing, and cabling.

Prerequisites: None
And one of the following: 44013, 44020

88435   DSR Hardware Test 2 (D35B)

Training Manager: AMA-470   Course Length: 6 hour(s)

This exam tests know ledge of the IBM RISC 6000 Display System Replacement (DSR) Hardw are System for ARTCC's, including theory, error indications, troubleshooting, testing, and cabling.

Prerequisites: 88434
And one of the following: 44013, 44020

88436   Fundamental of Internetworking for NAS (D36)

Training Manager: AMA-480   Course Length: 2 hour(s)

This exam tests theory of operation on the fundamentals of internetw orking for NAS. Subjecets include principles of netw orking, TCP/IP, routing, and new Window s NT version 4.0.

Prerequisites: None
And one of the following: None

88437   UNIX for NAS (D37)

Training Manager: AMA-480   Course Length: 3 hour(s)

This exam covers basic UNIX commands, UNIX system administration, and netw ork concepts (including setup and configuration of NIS, NFS, and DNS).

Prerequisites: None
And one of the following: None

88438   NAS Overview for OCC Specialists (D38)

Training Manager: AMA-480   Course Length: 2 hour(s)

This exam covers the role of Operations Control Center (OCC) and the National Operations Ccontrol Center (NOCC) in the NAS, OCC specialists and their role in the NAS, NAS/en route/terminal and general services areas, technical support facilities, commercial airplane flight, and future projections for equipment and services and Airw ay Facilities.

Prerequisites: None
And one of the following: None

88439   AWOS (D39)

Training Manager: AMA-480   Course Length: 3 hour(s)

This exam covers the AWOS system configuration, system operation, technical procedures, system malfunctions, and troubleshooting.

Prerequisites: None
And one of the following: None

88441   Network+ Certification (D41)

Training Manager: AMA-490   Course Length: 2 hour(s)

This exam is a Comptia vendor-neutral certification that measures the technical know ledge of netw orking professionals w ith 18-24 months experience in the IT industry. This test is administered by NCS/V UE and Prometric. This certification indicates the technician possesses the know ledge needed to configure and operate a variety of netw orking products. The exam covers a w ide range of vendor and product neutral netw orking technologies that can also serve as a prerequisite for vendor-specific IT certifications. There are 65 questions on this exam.

Prerequisites: None
And one of the following: None

88520   Wind/Altimeter Equipment (CP9)

Training Manager: AMA-410   Course Length: 4 hour(s)

The exam tests proficiency in w ind direction indicator, w ind-speed transmitter, w ind-speed indicators, w ind retransmitter, altimeter setting indicator, and digital altimeter setting indicator.

Prerequisites: None
And one of the following: None

88527   VDF Type CA-3300 (CP16)

Training Manager: AMA-410   Course Length: 4 hour(s)

The exam tests proficiency in the V DF Type CA-3300. Subjects include antennas (CA-3310), receiver (CA-3320), amplifier-pow er supply (CA-3332), mechanical indicators azimuth (CA-3345), control unit (CA-3344), adapter unit (CA-3341), ground check, and flight inspection check.

Prerequisites: None
And one of the following: None

88530 RBC (CP19)

Training Manager: AMA-410   Course Length: 5 hour(s)

The exam tests proficiency in the rotating beam ceilometer (RBC). Subjects include projector, detector, and indicator.

Prerequisites: None
And one of the following: None

88540 Recorder, Leach, 5-CH, FA8144 (CP29)

Training Manager: AMA-410   Course Length: 8 hour(s)

The exam tests proficiency in the Leach 5-channel recorder type FA-8144. Subjects include pow er supply, 5-channel recorder, reproducer, tape cartridge, mixing amplifier, tape log, and re-recording techniques.

Prerequisites: None
And one of the following: None

88541   VDF (Doppler) Remoting Equipment (CP30)

Training Manager: AMA-410   Course Length: 3 hour(s)

The exam tests proficiency in the VDF (doppler) remoting equipment FA-5571/5572. Subjects include local control unit (FA-5571), local control unit data transmitter, remote control unit (FA-5572), and indicator.

Prerequisites: None
And one of the following: None

88542   Recorder, Magnasync TR-1720/1710 (CP31)

Training Manager: AMA-410   Course Length: 5 hour(s)

The exam tests proficiency in the magnasync recorder (TR-1720/tr-1710). Subjects include recorder operation, pow er supply/bias checks, system checks, monitor panel, fail safe monitor, reproduce amplifier, time code generator, and reproducer.

Prerequisites: None
And one of the following: None

88543   BUEC (FA-8190, FA-8191) (CP32)

Training Manager: AMA-410   Course Length: 8 hour(s)

The exam tests proficiency in the backup emergency communications VHF transceiver 20 w att, type FA-8190/8191. Subjects include coordination, preliminary checks, tone generator adjustments and connections, receiver performance, keying tone notch, filter adjustment, transmitter performance, antennas and transmission lines, and control lines system.

Prerequisites: None
And one of the following: None

88545   BUEC Remote Control Group (ARTCC) (CP34)

Training Manager: AMA-410   Course Length: 4 hour(s)

The exam tests proficiency in the BUEC remote control group. Subjects include coordination, command and transmitter keying checks, pow er supplies check, tone generator frequency check, ready error detection alignment, transmit audio level adjustment, removal/replacement of priority module, maintenance panel operation, and remote link tester.

Prerequisites: None
And one of the following: None

88547   CMLT (Farinon) (CP36)

Training Manager: AMA-410   Course Length: 10 hour(s)

The exam tests proficiency in communication link equipment, Farinon Type PT-150. Subjects include pow er supply adjustment, receiver and transmitter voltage checks, transmitter pow er and combined transmitter, output, transmitter frequency check and deviation, receiver calibration, base and frequency response, net path attenuation, baseband and multiplex system noise, and various other checks and adjustments.

Prerequisites: None
And one of the following: None

88548   Low-Level Wind Shear Alert System (LLWAS)(CP37)

Training Manager: AMA-420   Course Length: 8 hour(s)

The exam tests proficiency in Low -Level Windshear Alert System (LLWAS), Type FA-10240. Subjects include system operation, transmission error count, w indshear alarm and centerfield gust threshold, data fail alarm, anemometer checks, transmitter RF pow er and VSWR, transmitter frequency deviation, receiver checks, and data storage/dump to tape.

Prerequisites: None
And one of the following: None

88549   LLWAS Climatronics (FA-10239) (CP38)

Training Manager: AMA-420   Course Length: 8 hour(s)

The exam tests proficiency in Low -Level Windshear Aleret System (LLWAS), Type FA-10239. Subjects include system operation, transmission error count, w indshear alarm and centerfield gust threshold, data fail alarm, anemometer checks, transmitter RFpow er and VSVWR, transmitter frequency deviation, receiver checks, data

storage/dump to tape, and calibration standards.

Prerequisites: None
And one of the following: None

88550 Doppler DF (FA-9964) (CP39)

Training Manager: AMA-410 Course Length: 8 hour(s)

The exam tests proficiency in certification procedures and parameters, pow er supply checks, doppler DF performance checks, system alignment, and flight inspection.

Prerequisites: None
And one of the following: None

88551 CP-40-Dictaphone 5000 Recorder

Training Manager: AMA-410 Course Length: 4 hour(s)

The exam tests proficiency in pow er supply/bias adjustments, system adjustments, system checks, monitor control adjustments, time/date code generator/reader adjustments, time/date code generator operation, recorder operation, monitor panel operation and use, reproducer checks, tape break check, tape erase and splicing demonstrations, use of tape log, and restoring system to normal operation (coordination w ith air traffic).

Prerequisites: None
And one of the following: None

88557 ATIS - TWEB COMEX Solid-State Type FA-10012 (CP46)

Training Manager: AMA-480 Course Length: 4 hour(s)

The exam tests proficiency in the COMEX Digital Deck (CDD-1000) Solid-State ATIS Recorder/Reproducer Set, Type FA-10012. Subjects include output level adjustment, system frequency response, system signal-to-noise ratio, and special checks.

Prerequisites: None
And one of the following: None

88558 VHF Communications Equipment (CP47)

Training Manager: AMA-410 Course Length: 8 hour(s)

The exam tests proficiency in VHF Communications Equipment, including AN/GRR and AN/GRT equipment and CM-200R and CM-200T equipment. Subjects include coordination w ith air traffic, receiver performance, final checks, alignment procedures, placing standby equipment in operation, transmitter adjustments, recording meter readings, and antennas and transmission lines.

Prerequisites: None
And one of the following: None

88559 UHF Communications Equipment (CP48)

Training Manager: AMA-410 Course Length: 8 hour(s)

The exam tests proficiency in UHF communications equipment, including AN/GRR and AN/GRT equipment and CM-200R and CM-200T equipment. Subjects include coordination w ith air traffic, receiver performance, final checks, alignment procedures, placing standby equipment in operation, transmitter adjustments, recording meter readings, and antennas and transmission lines.

Prerequisites: None
And one of the following: None

88561 CE Control Site Wiring (CP50)

Training Manager: AMA-410 Course Length: 4 hour(s)

The exam tests proficiency in communications equipment facility (control site) w iring. Subjects include using facility draw ings and equipment instruction book to trace a voice path, a control circuit, path of received audio signal, and voice circuit of the interphone.

Prerequisites: None
And one of the following: None

88562 Communications Equipment Facility Wiring (Remote Site)(CP51)

Training Manager: AMA-410 Course Length: 2 hour(s)

The exam tests proficiency in communications equipment facility (remote site) w iring. Subjects include using facility draw ings and equipment instruction book to trace a voice path, a control circuit, path of received audio signal, and voice circuit of the interphone.

Prerequisites: None
And one of the following: None

88563 CE Control and Monitoring Equipment (CP52)

Training Manager: AMA-410 Course Length: 7 hour(s)

The exam tests proficiency in Communications Equipment control and monitoring equipment. Subjects include test procedure FAA-S-1142A lines, voice grade lines, AC/DC control lines, control equipment, DC pow er supply (48 volts), radio channel control equipment FA-9334, radio channel control equipment FA-8165, four-channel control, Integrated Communications Sw itching System (ICSS), monitoring systems, voice frequency signaling system (tube type equipment), Voice Frequency Signaling System intelect model 3130A, VFSS (GRIM) Types LCT-CNTR-1A and RCT-RCAG-1A, and restoring equipment to normal operating condition.

Prerequisites: None
And one of the following: None

88564   Frequency Modulation Equipment (LCOT) (CP53)

Training Manager: AMA-410   Course Length: 6 hour(s)

The exam tests proficiency in frequency modulation equipment (LCOT). Subjects include coordination prior to removal from service, transmitter adjustments, transmission lines, antenna measurements, antenna adjustments, hot switchover system, power supplies, and restoration of equipment to normal with proper adjustments.

Prerequisites: None
And one of the following: None

88567   RVR/RVV Transmissometer, Etc. (CP56)

Training Manager: AMA-420   Course Length: 2 hour(s)

The exam tests proficiency on the RVR/RVV transmissometer. Areas covered by the exam include transmissometer adjustments or alignments, indicator chassis, and recorder.

Prerequisites: None
And one of the following: None

88568   RVR/RVV (SSR) (CP57)

Training Manager: AMA-420   Course Length: 3 hour(s)

This exam tests proficiency on the SSR RVR/RVV. Areas covered by the exam include runway light intensity relay chassis, day-night switch, remote display, receiver-decoder, runway computer selector, command generator, and ten relay indicator matrix.

Prerequisites: None
And one of the following: None

88569   RVR/RVV (IRA) (CP58)

Training Manager: AMA-420   Course Length: 3 hour(s)

This exam tests proficiency on the IRA RVR/RVV. Areas covered by the exam include runway light intensity relay chassis, day-night switch, remote display, receiver-decoder, runway computer selector, time base generator, function generator, RVR tables, answer translator, and power supply and control panel.

Prerequisites: None
And one of the following: None

88570   RVR/RVV (Aeronca) (CP59)

Training Manager: AMA-420   Course Length: 3 hour(s)

This exam tests proficiency on the Aeronca RVR/RVV. Areas covered by the exam include runway light intensity chassis, day-night switch, remote display, receiver-decoder, runway computer selector, time function generator, transmissivity register, answer converter, power supply, signal data converter, and generator.

Prerequisites: None
And one of the following: None

88571   RVR/RVV (Tasker) 500 (CP60)

Training Manager: AMA-420   Course Length: 3 hour(s)

This exam tests proficiency on the Tasker 500 RVR/RVV. Areas covered by the exam include runway light intensity chassis, day-night switch, remote display, receiver-decoder, runway computer selector, signal data converter, remote display programmer, and mainframe.

Prerequisites: None
And one of the following: None

88572   Single Channel Digital Recorder System FA-10146 (CP61)

Training Manager: AMA-410   Course Length: 7 hour(s)

The exam tests proficiency in the Single Channel Digital Recorder System (FA-10146). Subjects include coordination with air traffic, system operation, maintenance, and final check.

Prerequisites: None
And one of the following: None

88573   Qualimetrics AWOS (CP62)

Training Manager: AMA-480   Course Length: 4 hour(s)

This exam tests proficiency in the following areas of the qualimetrics AWOS; remote sensor identification, central-data platform identification, log procedures, voice data checks, terminal operation, sensor interface processor check, wind speed and direction, temperature and dew point visibility, day/night sensor, precipitation, cloud height, barometric pressure, central data platform, and aircraft accident procedures.

Prerequisites: None
And one of the following: None

88575   Voice Switching and Control System (VSCS) Hardware (CP67)

Training Manager: AMA-410   Course Length: 28 hour(s)

This exam tests proficiency on the VSCS. The areas covered by the exam include the control subsystem, the switching subsystem, position equipment, and the system interconnect subsystem.

Prerequisites: None
And one of the following: 40272, 48171

88576 High Capacity Voice Recorder (Magnasync/Moviola)(CP65)

Training Manager: AMA-410   Course Length: 12 hour(s)

This exam tests proficiency in the following areas of the Magnasync/Moviola high capacity voice recorder: cleaning, tape loading, operating checks, recorder inspection, demagnetizing heads, inspecting voice quality, reproducer operation, reproducer inspection, time channel validation, tape handling and storage, and master synchronizer operation.

Prerequisites: None
And one of the following: None

88577 LLWAS NE, Type FA-10387 (CP66)

Training Manager: AMA-420   Course Length: 8 hour(s)

The exam tests proficiency in evaluating system operation; performing simulated operational checks; verifying windshear alarm threshold; verifying data fail alarm; performing aneomometer checks; verifying controller displays; checking transmitter RF power, VSWR, and frequency/deviation; performing receiver checks, data storage dump to tape, and AC power fail (remotes).

Prerequisites: None
And one of the following: None

88578 Teledyne Runway Visual Range (RVR) System (CP64)

Training Manager: AMA-420   Course Length: 4 hour(s)

This exam tests proficiency on the Teledyne Runway Visual Range (RVR) System. Areas covered by the exam include the data processing unit, visibility sensor/sensor interface electronics (ALS/SIE), runway light intensity monitor/sensor interface electroncis (RLIM/SIE), and controller display.

Prerequisites: None
And one of the following: None

88579 Nexcom Multimode Digital Radio (Analog) (CP69)

Training Manager: AMA-410   Course Length: 8 hour(s)

This exam tests proficiency on the nexcom multimode digital radio (MDR) (analog) equipment. Subjects include the MDR receiver and transmitter system parameter measurements include RX and TX frequency stability; RX sensitivity, selectivity, SINAD (SNR), AVC action and squelch settings; TX operating frequency, RF power output, modulation checks and load VSWR.

Prerequisites: None
And one of the following: None

88580 Digital Voice Recorder System (CP68)

Training Manager: AMA-410   Course Length: 8 hour(s)

This exam tests proficiency in the Digital Voice Recorder System (DVRS) equipment. Subjects include system gain, audio frequency response, signal-to-noise ratio, crosstalk, remote alarm operation and indication, playback voice quality, time source correctness, and computer workstation software configuration.

Prerequisites: None
And one of the following: None

88581 VHF and UHF Communications Equip and Facility Wiring (CP70)

Training Manager: AMA-410   Course Length: 16 hour(s)

This performance examination tests proficiency on the VHF and UHF communication equipment and facility wiring. Equipment included in this exam: Motorola CM-200 Receiver/Transmitter System. ITT AN/GRT-21 and AN/GRT-22 transmitters, ITT AN/GRR-23 and AN/GRR-24 receivers, radio control equipment, and facility wiring. Subjects include VHF/UHF receiver and transmitter operation and adjustments, coordination of maintenance activities, certification requirements, radio control equipment (RCE) interfaces, antennas and transmission line measurement procedures and tracing the voice and signal paths using facility wiring drawings.

Prerequisites: None
And one of the following: None

88582 Digital Voice Recorder 2 (DVR2) (CP71)

Training Manager: AMA-410   Course Length: 8 hour(s)

This exam tests proficiency on the Digital Voice Recorder Series II, (DVR2). Subjects include system gain, audio frequency response, signal-to-noise ratio, crosstalk, remote alarm operation and indication, playback voice quality, time source correctness, and computer workstation software configuration.

Prerequisites: 40045
And one of the following: None

88583 Enhanced Terminal Voice Switch (ETVS) (CP72)

Training Manager: AMA-410 Course Length: 5 hour(s)

This exam tests proficiency on the enhanced terminal voice switch (ETVS). Subjects include overall system level alignment, radio processor alignment, alignments on the five different types of telephone interfaces, automatic gain control alignment for microphone and telephone, power supply alignment, battery checks, local mapping, global mapping, map editing, configuration settings, database backup procedures, control site side of the radio control equipment (RCE), and control site side of the facility wiring.

Prerequisites: 40041
And one of the following: None

88584 Small Tower Voice Switch (STVS) (CP73)

Training Manager: AMA-410 Course Length: 5 hour(s)

This exam tests proficiency on the Small Tower Voice Switch (STVS). Subjects include transmit channel alignment, receive channel alignment, telephone interface alignments, power supply alignments, local system mapping, global mapping, map editing, system information editing, and software configuration, control site side of the radio control equipment (RCE), and control site side of the facility wiring.

Prerequisites: 47507
And one of the following: None

88601 VASI (EP1B)

Training Manager: AMA-430 Course Length: 6 hour(s)

This exam tests proficiency in all types of VASI systems. It is divided into three sections: (1) general; (2) remote control; and (3) specific types of VASI systems. Complete only the subsection(s) applicable to the type of systems at your facilitiy.

Prerequisites: None
And one of the following: None

88602 REIL, LDIN (EP1C)

Training Manager: AMA-430 Course Length: 4 hour(s)

The exam tests proficiency in installation and maintenance of lead-in and runway-end identifier lighting systems.

Prerequisites: None
And one of the following: None

88608 EP4-Omni-Directional Approach Lighting System (ODALS)

Training Manager: AMA-430 Course Length: 4 hour(s)

This exam tests proficiency in the operation and maintenance of the ODALS.

Prerequisites: None
And one of the following: None

88609 ALSF, MALS, SALS, RAIL (EP5)

Training Manager: AMA-430 Course Length: 12 hour(s)

The exam tests proficiency in the operation and mainteance of the ALSF, MALS, SALS, and RAIL systems.

Prerequisites: None
And one of the following: None

88610 Multi-Electric MALSR FA-9425/1 (EP6)

Training Manager: AMA-430 Course Length: 4 hour(s)

This exam tests proficiency in the operation and maintenance of the multi-electric MALSR.

Prerequisites: None
And one of the following: None

88611 UPS Exide (EP7)

Training Manager: AMA-430 Course Length: 15 hour(s)

This exam tests proficiency in the operation and maintenance of the Exide uninterruptible power supply.

Prerequisites: None
And one of the following: None

88612 Precision Approach Path Indicator (PAPI) (EP8)

Training Manager: AMA-430 Course Length: 6 hour(s)

This exam tests proficiency in the operation and maintenance of the PAPI.

Prerequisites: None
And one of the following: None

88613 ATCT E/G Power Distribution (EP9)

Training Manager: AMA-430 Course Length: 6 hour(s)

The exam tests proficiency in the control tower engine generator power distribution system.

Prerequisites: None
And one of the following: None

88614   ARTCC Critical and Essential Power System (ACEPS) (EP10)

Training Manager: AMA-430   Course Length: 32 hour(s)

This exam tests proficiency in the pow er control and monitoring system (PCMS) configuration, sw itchgear operation, critical pow er centers (CPC), uninterruptible pow er modules (UPM), batteries, bypass transfer control system, and system-level tests of ACEPS.

Prerequisites: None
And one of the following: None

88615   MALSR Type FA-10290 (AVW)(EP11)

Training Manager: AMA-430   Course Length: 10 hour(s)

This performance exam covers the medium intensity approach lights w ith RAIL (MALSR) Type FA-10290 (AVW).

Prerequisites: 40143
And one of the following: None

88616   PAPI Type FA-10265 (AVW) and FA-10620 (NBP) (EP12)

Training Manager: AMA-430   Course Length: 6 hour(s)

This performance exam covers the precision approach path indicator (PAPI) Type FA-10265 (AVW) or tType FA-10620 (NPB).

Prerequisites: 47107
And one of the following: None

88617   DME MALSR (EP13)

Training Manager: AMA-430   Course Length: 6 hour(s)

This performance exam covers the Medium Intensity Approach Lighting System w ith RAIL (DME MALSR).

Prerequisites: 40147
And one of the following: None

88618   Dual Mode Intensity Appr (ALSF-2/SSALR) Type FA-10048 (EP14)

Training Manager: AMA-430   Course Length: 12 hour(s)

This performance exam covers the Dual Mode High Intensity Approach Lighting System (ALSF-2/SSALR) Airflow Type FA-10048.

Prerequisites: None
And one of the following: None

88701   VOT (NP2)

Training Manager: AMA-420   Course Length: 4 hour(s)

The exam tests proficiency in VHF omnidirectional range test (VOT) equipment. Subjects include calibration, adjustments, modulation adjustments, general requirements, flight inspection, and completion of meter reading form.

Prerequisites: None
And one of the following: None

88707   NDB-COMLO, Common (NP8)

Training Manager: AMA-420   Course Length: 7 hour(s)

The exam tests proficiency in the Comio Non-Directional Beacon (NDB). There are tw o sections. Section A subjects include transmitter adjustments, monitor adjustments, shutdow n time delay, automatic reset/changeover (if applicable), insulation resistance, battery charge/voltage level check, and return system to normal operation. Section B subjects include antenna, voice/identification quality check, local/remote monitor operation and adjustments, and flight check requirements.

Prerequisites: None
And one of the following: None

88710   TACAN, RTA-2 Ant.Gr. (NP11A)

Training Manager: AMA-420   Course Length: 2 hour(s)

Prerequisites: None
And one of the following: None

88731   Solid State Markers (NP30)

Training Manager: AMA-420   Course Length: 5 hour(s)

The exam tests proficiency in solid state markers. Subjects include transmitter adjustments, modulation level measurements, modulation frequency measurements, identification keying, equipment transfer and/or changeover initial monitor test, operating monitor adjustments, antenna and transmission line resistance and continuity, transmission line voltage standing w ave ratio (50 Ohm transmission line), simulated flight check, and actual flight check.

Prerequisites: None
And one of the following: None

88733   Remote Radio-Controlled Visual NavAids (NP32)

Training Manager: AMA-420   Course Length: 10 hour(s)

The exam tests proficiency in remote radio-controlled visual NavAids. Subjects include coordination of maintenance activities with air traffic (AT), use of local control for trouble isolation, test equipment adjustments and connections, FM receiver/decoder performance, alignment procedures, final checks, FM transmitter performance, AM receiver performance, system-level checks, control console tone output levels, flight inspection procedures, restoring equipment to normal operation, and final coordination of maintenance activities with AT.

Prerequisites: None
And one of the following: None

88736   VHF Cardion NavAid Transmitter Type FA-9467 (NP35)

Training Manager: AMA-420   Course Length: 10 hour(s)

The exam tests proficiency in VHF NavAid Transmitter Equipment, Type FA-9467. Subjects include transmitter tuning, modulator power supply, goniometer, RF phasing, space modulation, identification adjustments, coaxial cable leakage, VSWR and power measurements, antenna bridges and L-4 lines, control-line tests, voice equipment and modulation adjustments, VOR test generator calibration, VOR monitor adjustments, standard ground check (one set of equipment only), flight inspection (may be simulated), and post-flight inspection procedures.

Prerequisites: None
And one of the following: None

88741   Cardion DME (FA-9783) (NP40)

Training Manager: AMA-420   Course Length: 10 hour(s)

The exam tests proficiency in the Cardion Distance Measuring Equipment (DME), Type FA-9783. Subjects include ground station, DME monitor, and performance checks.

Prerequisites: None
And one of the following: None

88747   ILS, Wilcox Mark 1A Marker Beacon Type FA-8030 (NP47)

Training Manager: AMA-420   Course Length: 5 hour(s)

The exam tests proficiency in the Mark 1A Marker Beacon Station Type FA-8030. Subjects include power supply, transmitter, modulation level, modulation frequency, identification keying, transmission line VSWR, antenna and transmission line insulation resistance, monitor alarm, simulated flight check, and actual flight check.

Prerequisites: None
And one of the following: None

88753   ILS, Wilcox Mark 1F Localizer Type FA-9903 (NP53)

Training Manager: AMA-420   Course Length: 8 hour(s)

This exam tests proficiency in the Mark 1F Localizer Type FA-9903. Subjects include transmitter adjustments, identification modulation, waveform analysis (mech-modulator), Antenna System, monitor adjustments, RF phasing, ground check, flight inspection, local control unit, and remote status indicator (land line only).

Prerequisites: None
And one of the following: None

88754   Wilcox Mark 1F Null Ref Glideslope, Type FA-9919 (NP54)

Training Manager: AMA-420   Course Length: 8 hour(s)

The exam tests proficiency in the Mark 1F Null Reference Glideslope, Type FA-9919. Subjects include transmitter, waveform analysis, RF phasing, antenna mast proximity, position, antenna system, monitor adjustments, flight inspection, and local control unit.

Prerequisites: None
And one of the following: None

88755   ILS, Wilcox Mark 1F Sideband Ref GS FA-9919/9929 (NP55)

Training Manager: AMA-420   Course Length: 10 hour(s)

The exam tests proficiency in the Mark 1F Sideband Reference Glideslope, Type FA-9919/9929. Subjects include transmitter adjustment, waveform analysis, distribution unit, RF phasing, detector location (sideband reference), antenna system, monitor adjustments, flight inspection, remote status indication (land lines only), and control unit.

Prerequisites: None
And one of the following: None

88756   ILS, Wilcox Mark 1F CEGS FA-9919/9928 (NP56)

Training Manager: AMA-420   Course Length: 10 hour(s)

The exam tests proficiency in the Mark 1F Capture Effect Glideslope, Type FA-9919/9929. Subjects include reference transmitter, clearance transmitter, adjust RF power ratios at APCU, waveform analysis, RF phasing, antenna system, monitor input signals, monitor performance checks, pre-flight inspections, remote status indicator,

and control unit.

Prerequisites: None
And one of the following: None

88757 ILS, Wilcox Mark 1F MKR FA-9930/9937 (NP57)

Training Manager: AMA-420 Course Length: 5 hour(s)

The exam tests proficiency in the Mark 1F Marker Beacon Station Type, FA-9930/9937. Subjects include transmitter adjustments, antenna system, monitor alarms, simulated flight inspection, and remote status indicator.

Prerequisites: None
And one of the following: None

88762 ILS, Wilcox Mark 1D/1E LOC FA-9350/FA-9700 (NP62)

Training Manager: AMA-420 Course Length: 8 hour(s)

The exam tests proficiency in the Mark 1D/1E Localizer, Type FA-9350/FA-9700. Subjects include transmitter, identification modulation, waveform analysis, RF phasing, antenna system, monitor adjustments, ground check, flight inspection, remote monitor receiver alarm, and test equipment.

Prerequisites: None
And one of the following: None

88763 ILS, Wilcox Mark 1D/1E NRGS, FA-9365/FA-9715 (NP63)

Training Manager: AMA-420 Course Length: 8 hour(s)

The exam tests proficiency in the Mark 1D/1E Null Reference Glideslope, Type FA-9365/FA-9715. Subjects include transmitter, waveform analysis, RF phasing, antenna system, monitor adjustments, flight inspection, and remote monitor receiver alarm.

Prerequisites: None
And one of the following: None

88764 ILS, Wilcox Mark 1D/1E SBRGS, FA-9367 (NP64)

Training Manager: AMA-420 Course Length: 10 hour(s)

The exam tests proficiency in the Mark 1D/1E Sideband Reference Glideslope, Type FA-9367. Subjects include transmitter, waveform analysis, distribution unit, RF phasing, detector location (sideband reference), antenna system, monitor adjustments, and flight inspection.

Prerequisites: None
And one of the following: None

88765 ILS, Wilcox Mark 1D/1E CEGS, FA-9366/FA-97XX (NP65)

Training Manager: AMA-420 Course Length: 10 hour(s)

The exam tests proficiency in the Mark 1D/1E Capture Effect Glideslope. Subjects include reference transmitter, clearance transmitter, adjust RF power ratios at APCU, waveform analysis, RF phasing, antenna system, monitor adjustment, monitor performance checks, flight check, and remote status indicator.

Prerequisites: None
And one of the following: None

88766 ILS, Wilcox Mark 1D/1E Markers, FA-938X/FA-972X (NP66)

Training Manager: AMA-420 Course Length: 5 hour(s)

The exam tests proficiency in the Mark 1D/1E Markers, Types FA-938X/FA-972X. Subjects include transmitter, modulation measurements, antenna and transmission line, monitor alarm, check automatic transfer/shutdown function, simulated flight check, and actual flight check.

Prerequisites: None
And one of the following: None

88770 ILS, Mark 1B, MKR FA-8603 (NP70)

Training Manager: AMA-420 Course Length: 5 hour(s)

The exam tests proficiency in the Mark 1B Marker, Type FA-8603. Subjects include transmitter, modulation level, modulation frequency, identification keying, transmission line VSWR, antenna and transmission line insulation resistance, monitor alarm, and simulated flight check.

Prerequisites: None
And one of the following: None

88771 Null Reference Glideslope (General) (NP71)

Training Manager: AMA-420 Course Length: 8 hour(s)

The exam tests proficiency in general null reference glideslope. Subjects include transmitter, modulation measurements, sideband generator, harmonic distortion, antenna system, analysis of waveform distortion, antenna bridge balance, detector location, monitor adjustments, RF phasing, and flight inspection.

Prerequisites: None
And one of the following: None

88772   Sideband Reference Glideslope (General) (NP72)

Training Manager: AMA-420   Course Length: 8 hour(s)

The exam tests proficiency in the general Sideband Reference Glideslope. Subjects include transmitter, modulation Measurements, sideband generator, harmonic distortion, antenna system, analysis of waveform distortion, antenna bridge balance, detector locations, system phasing, monitor, RF phasing, and flight inspection.

Prerequisites: None
And one of the following: None

88773   Capture Effect Glideslope (General) (NP73)

Training Manager: AMA-420   Course Length: 10 hour(s)

The exam tests proficiency in the general Capture Effect Glideslope. Subjects include power supply adjustments, course transmitter, clearance transmitter, modulator, analysis of waveforms distortion, antenna distribution and transmission, near- field monitor, width and clearance recombination circuits,   monitor adjustments, and flight inspection.

Prerequisites: None
And one of the following: None

88774   Cardion DME Ground Station Effect, Type FA-9639 (NP74)

Training Manager: AMA-420   Course Length: 5 hour(s)

The exam tests proficiency in the Cardion Distance Measuring Equipment Ground Station Effect, Type FA-9639. Subjects include ground station and DME monitor.

Prerequisites: None
And one of the following: None

88775   Cardion DME Ground Station Type, FA-8974 (NP75)

Training Manager: AMA-420   Course Length: 5 hour(s)

The exam tests proficiency in the Cardion Distance Measuring Equipment Ground Station, Type FA-8974. Subjects include ground station and DME monitor.

Prerequisites: None
And one of the following: None

88776   Second Generation VORTAC BCPS FA-9996/1 (NP76)

Training Manager: AMA-420   Course Length: 2 hour(s)

This exam tests proficiency on the second generation VORTAC BCPS Type FA-9996/1. Subjects include IOT operation and power supply performance.

Prerequisites: None
And one of the following: None

88777   Second Generation VORTAC VOR/FCPU FA-9996/2 (NP77)

Training Manager: AMA-420   Course Length: 6 hour(s)

This exam tests proficiency on the second generation VORTAC VOR/FCPU, Type FA-9996/2. Subjects include IOT operation, VOR transmitter, VOR monitor, fight check, and FCPU.

Prerequisites: None
And one of the following: None

88778   Second Generation VORTAC RMC-F FA-9996/7 (NP78)

Training Manager: AMA-420   Course Length: 2 hour(s)

This exam tests proficiency on the second generation VORTAC RMC-F, Type FA-9996/7. Subjects include RMC-F operation.

Prerequisites: None
And one of the following: None

88779   Second Generation VORTAC DME/TACAN FA-9996/3 (NP79)

Training Manager: AMA-420   Course Length: 6 hour(s)

This exam tests proficiency on the Second Gen VORTAC DME/TACAN, Type fa9996/3. Subjects include transponder monitor, TACAN only, and flight check.

Prerequisites: None
And one of the following: None

88780   Second Gen VORTAC Antenna Speed Controls (NP80)

Training Manager: AMA-420   Course Length: 2 hour(s)

This exam tests proficiency on the second generation VORTAC RTA-2 Antenna Speed Controls, Type FA-6247, FA-6238, and low -power TACAN Antenna Speed Controls, Type FA-10369. Subjects include Antenna Speed Control RTA-2, Type FA-6247 and FA-6238 and low -

pow er TACAN Antenna, Type FA-10349.

**Prerequisites: None
And one of the following: None**

88781   Endfire Glideslope Antenna System (NP99)

Training Manager: AMA-420   Course Length: 16 hour(s)

This exam tests proficiency in the calibration, alignment, and certification of the Mark 1F or Mark 20 transmitter systems, endfire glideslope array, monitor alarms, and flight inspection.

**Prerequisites: 47709
And one of the following: None**

88782   ILS, Wilcox CAT III LOC FA-9759 (NP82)

Training Manager: AMA-420   Course Length: 8 hour(s)

The exam tests proficiency in the Category III Localizer, Type FA-9759. Subjects include course transmitter (FA-9759/4), identification modulation, clearance transmitter (FA-9759/3), identification modulation, w aveform analysis, phasing, antenna system, monitor adjustments, remote control unit, FFM, ground check, and flight inspection.

**Prerequisites: None
And one of the following: None**

88783   ILS, Wilcox CAT III MKR FA-9761 (NP83)

Training Manager: AMA-420   Course Length: 5 hour(s)

The exam tests proficiency in the category III Marker Beacon Subsystem, Type FA-9761. Subjects include pow er supply, transmitter, modulation measurements, antenna and transmission line, monitor alarm, simulated flight check, and actual flight check.

**Prerequisites: None
And one of the following: None**

88784   ILS, Wilcox CAT III NRGS FA-9760/5 (NP84)

Training Manager: AMA-420   Course Length: 8 hour(s)

The exam tests proficiency in the Category III Null Reference Glideslope, Type FA-9760/5. Subjects include transmitter, w aveform analysis, RF phasing, detector location (null reference), antenna system, monitor adjustments, remote control unit, and flight inspection.

**Prerequisites: None
And one of the following: None**

88785   ILS, Wilcox CAT III CEGS FA-9760 (NP85)

Training Manager: AMA-420   Course Length: 8 hour(s)

The exam tests proficiency in the Category III Capture Effect Glideslope, Type FA-9760. Subjects include transmitters, modulator characteristics, audio phasing, antenna system, monitor alarm points, and flight inspection.

**Prerequisites: None
And one of the following: None**

88786   Doppler VOR, Type FA-9996 (NP41)

Training Manager: AMA-420   Course Length: 10 hour(s)

This exam tests proficiency on the Doppler VOR, Type FA-9996. Subjects include pow er system performance checks, IOT operation, VOR transmitter, VOR/DVOR monitors, and flight check procedures.

**Prerequisites: 88776, 88777, 88778
And one of the following: None**

88787   VHF Omnirange Wilcox Model 476B (NP86)

Training Manager: AMA-420   Course Length: 10 hour(s)

This exam tests proficiency on the Wilcox Model 476B VHF Omnirange Set. Subjects include transmitter tuning, goniometer, antenna, RF phasing, keyer ident/voice, modulation, VOR monitor adjustments, ground-check, control Line tests, voice equipment and modulation adjustments, flight inspection, and post-flight inspection procedures.

**Prerequisites: None
And one of the following: None**

88788   VHF Omnirange Wilcox Model 585B (NP87)

Training Manager: AMA-420   Course Length: 10 hour(s)

This exam tests proficiency on the Wilcox Model 585B VHF Omnirange Station. Subjects include transmitter tuning, goniometer, antenna, RF phasing, keyer ident/voice, modulation, VOR monitor adjustments, ground check, control line tests, voice equipment and modulation adjustments, flight inspection, and post-flight inspection procedures.

**Prerequisites: None
And one of the following: None**

88789   Localizer With V-Ring Antenna Array (NP88)

Training Manager: AMA-420   Course Length: 8 hour(s)

The exam tests proficiency in the localizer w ith V-ring antenna array. Subjects include transmitter adjustments, 1020 hz oscillator adjustment, time delay relays, modulation levels, monitor alarm limits,

sideband generator tuning and adjustment, modulation bridge (bridge unbal), hybrid bridge (bridge unbal), test equipment adjustment, antenna bridge, course alignment, course width, phasing, V-Ring monitoring, and flight check.

Prerequisites: None
And one of the following: None

88790   Localizer with Alford 8-Loop Antenna System (NP89)

Training Manager: AMA-420   Course Length: 8 hour(s)

The exam tests proficiency in the Localizer with Alford 8-Loop Antenna System. Subjects include transmitter adjustments, 1020 Hz oscillator adjustment, time delay relays, modulation levels, monitor alarm limits, sideband generator tuning and adjustment, modulation bridge (bridge unbal), hybrid bridge(bridge unbal), test equipment adjustment, antenna array, course structure,   phasing, and flight check.

Prerequisites: None
And one of the following: None

88791   Localizer With Traveling Wave Antenna (TWA) System (NP90)

Training Manager: AMA-420   Course Length: 8 hour(s)

The exam tests proficiency in the localizer with Traveling Wave Antenna System. Subjects include transmitter adjustments, 1020 Hz oscillator adjustment, time delay relays, modulation levels, monitor alarm limits, sideband generator tuning and adjustment, modulation bridge (bridge unbal), hybrid bridge (bridge unbal), test equipment adjustment, antenna distribution, course   alignment, course width, phasing, TWA monitoring, and flight check.

Prerequisites: None
And one of the following: None

88792   Localizer With Waveguide Antenna Array (NP91)

Training Manager: AMA-420   Course Length: 8 hour(s)

The exam tests proficiency in the localizer with waveguide antenna array. Subjects include transmitter adjustments, 1020 Hz oscillator adjustment, time delay relays, modulation levels, monitor alarm limits, sideband generator tuning and adjustments, modulation bridge (bridge unbal), hybrid bridge (bridge unbal), test equipment adjustment, RF frequency, phasing, antenna slot currents, antenna bridge, RF null on waveguide, course alignment, course width, ground check with PIR, monitor system, and flight check.

Prerequisites: None
And one of the following: None

88793   Butler DME Model 1020 (NP92)

Training Manager: AMA-420   Course Length: 8 hour(s)

The exam tests proficiency in the Butler DME Model 1020. Subjects include monitor and transponder.

Prerequisites: None
And one of the following: None

88794   Wilcox Model 596B/C DME (NP93)

Training Manager: AMA-420   Course Length: 8 hour(s)

The exam tests proficiency in the Wilcox model 596B DME. Subjects include transponder, monitor, and control unit.

Prerequisites: None
And one of the following: None

88795   Non-Directional Beacon (NDB) Nautel NX 8000BD-02-01 (NP94)

Training Manager: AMA-420   Course Length: 10 hour(s)

The exam tests proficiency in the Non-directional beacon (NDB) Nautel NX 8000BD-0201. Subjects include transmitter adjustments, monitor, antenna safety gap adjustment, transmission line leaking/resistance, antenna tuning unit, and flight check requirements.

Prerequisites: None
And one of the following: None

88796   LF/MF NDB Scientific Radio System, Type FA-9589/9591 (NP95)

Training Manager: AMA-420   Course Length: 14 hour(s)

The exam tests proficiency in the LF/MF NDB Scientific Radio System, Type FA-9589/9591. Subjects include transmitter type FA-9589 indicator verifications, power disconnect procedure, visual inspection, check site sensors, power reconnect procedure, check condition of internal batteries with the IOT, modem alignment procedures, facility central processor unit (FCPU),   monitor/executive monitor, modulator/power amplifier/ATU electronics assembly, transmitter verification tests, monitor   receiver FA-9591, and flight check requirements.

Prerequisites: None
And one of the following: None

88797   Mark 20 Instrument Landing System (ILS) (NP96)

Training Manager: AMA-420   Course Length: 28 hour(s)

This exam covers the Wilcox Mark 20 Instrument Landing System (ILS). Subjects include localizer, Far Field Monitor, glideslope, marker beacon, remote indication and control equipment, link control unit (LCU), portable ILS receiver, and portable maintenance data terminal.

Prerequisites: None
And one of the following: 40282, 48282, 47710

88798   Third GEN VOR/DME VOR Portion (NP97)

Training Manager: AMA-420   Course Length: 4 hour(s)

This examination tests proficiency in VOR portion of the Third Gen VOR/DME equipment, Type FA-10391.

Prerequisites: 40286
And one of the following: None

88799   Third Gen VOR/DME FCPU and DME Portion (NP98)

Training Manager: AMA-420   Course Length: 4 hour(s)

This examination tests proficiency on FCPU and DME portion of the Third GEN VOR/DME equipment, Type FA-10391.

Prerequisites: 40286
And one of the following: None

88802   ARSR-1/2 Transmitter/Receiver Site (RP3)

Training Manager: AMA-440   Course Length: 12 hour(s)

The exam tests proficiency in the ARSR-1/2 Transmitter/Receiver System. Subjects include voltage regulator check, system timing, bite alignment, transmitter adjustments, normal receiver checks, video integrator adjustments, MTI receiver checks, stagger/destagger adjustments, stalo/AFC, radar set control, checks during flight check or simulated flight check, APG measurements, power supplies FA-9492/9493, air compressor checks, and use of facility drawings.

Prerequisites: None
And one of the following: None

88806   UPX-14 (RP6)

Training Manager: AMA-440   Course Length: 8 hour(s)

The exam tests proficiency in the UPX-14. Subjects include power supply alignment, power supply performance test and meter readings, transmitter alignment (low power only), transmitter performance Navships 93520(A) test (low power only), receiver alignment, receiver performance test Navships 93520(A), remote switching control, and defruiter Type MX-8757.

Prerequisites: None
And one of the following: None

88807   UPX-6/GPX-9B (RP7)

Training Manager: AMA-440   Course Length: 8 hour(s)

The exam tests proficiency in the UPX-6/GPX-9B. Subjects include transmitter adjustments, receiver adjustments, pulse form restorer, electrical synchronizer, coder-decoder control, and coder-decoder group.

Prerequisites: None
And one of the following: None

88834   ARSR-1/2 Indicator Site (RP24)

Training Manager: AMA-440   Course Length: 4 hour(s)

The exam tests proficiency on the ARSR-1/2 indicator system. Subjects include console initial adjustments, console performance tests and adjustments, indicator performance checks, overall minimum discernible signal, and video mapper performance test.

Prerequisites: None
And one of the following: None

88841   FPS-65A (RP31)

Training Manager: AMA-440   Course Length: 16 hour(s)

The exam tests proficiency in the FPS-65 Radar System. Subjects include utility power supply, Stalo O-315/FPS-20, Coho o-374/FPS-20, radar modulator, performance testing transmitter drive circuits, buffer-mixer, power distribution cabinet, dual high voltage power supplies, dual modulator drivers, dual modulator, power amplifier cabinet, alignment of IPA and HV pulses, radar set control, receiver system, power supplies check and adjust, MTI receiver adjustments, STC generator, MTI cancellation system adjustment, radar performance monitor, antenna system, VSWR, use of facility drawings, NAS interface modification, and video processing modification.

Prerequisites: None
And one of the following: None

88842   FPS-66/67 (RP32)

Training Manager: AMA-440   Course Length: 16 hour(s)

The exam tests proficiency in the FPS-66/67 Radar System. Subjects include Stalo; Coho; radar modulator; performance testing, transmitter drive circuits, buffer-mixer; power distribution cabinet; modulator driver; power amplifier cabinet; radar set control; receiver system; MTI receiver and channel divider wide-band section tuning; MTI cancelers; STC generator; receiver and canceler cabinet; power supplies check and adjustment; antenna system; VSWR; use of facility drawings;

NAS interface modification; and video processing modification.

Prerequisites: None
And one of the following: None

88843   ATCBI-4 (RP33)

Training Manager: AMA-440   Course Length: 7 hour(s)

This exam is for personnel who maintain the ATCBI-4 equipment.

Prerequisites: None
And one of the following: None

88845   ASR-7/7E/7F Radar Site FA-8200

Training Manager: AMA-450   Course Length: 10 hour(s)

This exam tests proficiency in radar system concepts; moving target indicator (MTI); timing; magnetron transmitter; solid-state receiver; microprocesor controlled sensitivity time control (STC); and range-azmuth gating of antenna beam switching/video gating.

Prerequisites: None
And one of the following: None

88850   CD, FYQ-47/49 (RP40)

Training Manager: AMA-440   Course Length: 12 hour(s)

The exam tests proficiency in the FYQ-47/49 common digitizer system.

Prerequisites: None
And one of the following: None

88851 FPS-90/FPS-6/FPS-116 (RP41A)

Training Manager: AMA-440   Course Length: 16 hour(s)

This exam is for personnel who maintain the FPS-90, FPS-6, or FPS-6 radar systems.

Prerequisites: None
And one of the following: None

88858 ASR-8 (RP48)

Training Manager: AMA-450   Course Length: 22 hour(s)

This exam tests proficiency in system concepts, system timing, Klyston transmitter, normal receiver, Digital Moving Target Indicator System, sensitivity time control, Diversity Antenna System, control circuits.

Prerequisites: None
And one of the following: None

88863   ATCBI-5 (RP53)

Training Manager: AMA-440   Course Length: 10 hour(s)

Prerequisites: None
And one of the following: None

88865   RP-55 - AN/GPN-21,ASR-8 Radar Site

Training Manager: AMA-450   Course Length: 10 hour(s)

Prerequisites: None
And one of the following: None

88868   RCL Low Density Terminal or Repeater Equipment (RP58)

Training Manager: AMA-440   Course Length: 16 hour(s)

The exam tests proficiency in the RCL repeater facility equipment. Subjects include RCL power plant, FR8 Microwave Radio System, DTL 7300 Multiplexing System, and Acorn Network Control System.

Prerequisites: None
And one of the following: None

88877   ASR-4 Display System FA-4800 (RP67)

Training Manager: AMA-450   Course Length: 6 hour(s)

Prerequisites: None
And one of the following: None

88881   TML-3 Microwave Transmitter FA-9797 (RP71)

Training Manager: AMA-440   Course Length: 3 hour(s)

Prerequisites: None
And one of the following: None

88882 TML-3 Microwave Receiver FA-9798 (RP72)

Training Manager: AMA-440 Course Length: 3 hour(s)

Prerequisites: None
And one of the following: None

88883   Video Mapper Group AN/GPA-131(V) (RP73)

Training Manager: AMA-450 Course Length: 2 hour(s)

Prerequisites: None
And one of the following: None

88884   Video Mapper Group FA-8049 (RP74)

Training Manager: AMA-450 Course Length: 2 hour(s)

Prerequisites: None
And one of the following: None

88885   Video Mapper, Five Channel FA-8970 (RP75)

Training Manager: AMA-450 Course Length: 2 hour(s)

Prerequisites: None
And one of the following: None

88886   Television Microwave Link TCM-6 Transmitter (RP76)

Training Manager: AMA-440 Course Length: 3 hour(s)

Prerequisites: None
And one of the following: None

88887   Television Microwave Link TCM-6 Receiver (RP77)

Training Manager: AMA-440 Course Length: 3 hour(s)

Prerequisites: None
And one of the following: None

88889   ATCBI-3 Indicator Site (RP79)

Training Manager: AMA-440 Course Length: 4 hour(s)

Prerequisites: None
And one of the following: None

88896   ARSR 60/60M (RP86)

Training Manager: AMA-440 Course Length: 20 hour(s)

Prerequisites: None
And one of the following: None

88897   FPS-20/91 (RP87)

Training Manager: AMA-440 Course Length: 20 hour(s)

Prerequisites: None
And one of the following: None

88904   Coded Time Source (DP4)

Training Manager: AMA-480 Course Length: 2 hour(s)

Prerequisites: None
And one of the following: None

88905   CDC Display (CDC-D)(DP5)

Training Manager: AMA-470 Course Length: 12 hour(s)

Prerequisites: None
And one of the following: None

88906   Computer Update Equipment (CUE) (DP6)

Training Manager: AMA-470 Course Length: 6 hour(s)

Prerequisites: None
And one of the following: None

88908   CDC Processor (CDC-P) (DP8)

Training Manager: AMA-470 Course Length: 10 hour(s)

Prerequisites: None
And one of the following: None

88916   Direct Access Radar Channel (DARC) Performance (DP-16)

Training Manager: AMA-470 Course Length: 16 hour(s)

Prerequisites: None
And one of the following: None

88919   Tandem Computer (DP18)

Training Manager: AMA-470 Course Length: 12 hour(s)

This exam covers system familiarity configuration, operations, and diagnostics of the Tandem computer.

Prerequisites: None
And one of the following: None

88920   FSAS/AFSS/FSPS (DP19)

Training Manager: AMA-480 Course Length: 20 hour(s)

Prerequisites: None
And one of the following: None

88922   Host Computer System (CCCH) (DP21)

Training Manager: AMA-470 Course Length: 18 hour(s)

Prerequisites: None
And one of the following: None

88925   Peripheral Adapter Module Replacement Item (PAMRI)

Training Manager: AMA-490 Course Length: 4 hour(s)

Prerequisites: None
And one of the following: None

88926   CRAD/CFAD/DRAD (Dp25)

Training Manager: AMA-470 Course Length: 24 hour(s)

This performance exam tests proficiency in composite flight data processing (CFAD), composite radar data processing (CRAD), and direct access radar channel (DARC) radar data processing (DRAD) service certification procedures.

Prerequisites: None
And one of the following: None

88927   Display Channel Complex Rehost (DCCR) (DP26)

Training Manager: AMA-470 Course Length: 16 hour(s)

This exam tests the technician's ability to perform element certification of the DCCR processor and display controller (IBM ES9221, Model 170) and service-level certification of the R-console interface module (RIM) switch.

Prerequisites: None
And one of the following: None

88928   DSR Control Room Hardware Maintenance (DP27)

Training Manager: AMA-470 Course Length: 16 hour(s)

This exam tests proficiency on the Display System Replacement (DSR) control room hardware maintenance. The exam covers maintenance procedures on the main display monitor, main display unit, primary channel processor, console display generator, power distribution unit, loudspeaker, panel assembly, console light assembly, backlit chart holder, flight strip bay lamps, flight strip printer, 15-inch monitor, keyboard breakout box, and M&C Position 4232 printer.

Prerequisites: None
And one of the following: None

88929   Central Computer Complex HOST (CCCH) System (Dp28)

Training Manager: AMA-470 Course Length: 18 hour(s)

This exam tests proficiency in the Central Computer Complex HOST (CCCH) System. The exam covers system performance checks, CCCH system requirements, and tasks required to certify the system, including coordination of the release of all floor replaceable units with air traffic through the AMCC/MCC. Technicians currently holding certification authority and responsibility for CCCH need only to

complete steps 1, 2, 4.h - 4.m, 5, and 6. Technicians not holding certification authority and responsibility for CCCH must complete the entire exam. The changes made to the exam profile description include removing the FIC 266AD and modifying the referenced steps.

Prerequisites: None
And one of the following: None

88930   HNL (Dp29)

Training Manager: AMA-480   Course Length: 5 hour(s)

This exam tests performance on the Host Interface Device/National Airspace System-Local Area Network (HNL). The exam covers system performance checks and HNL system requirements, including Host Interface Device (HID), network system monitor (NSM), network router, FDDI, concentrator, printer, and ecom.

Prerequisites: None
And one of the following: None

88932   DSR, Part I, Support Systems (DP31A)

Training Manager: AMA-470   Course Length: 12 hour(s)

This exam tests technical proficiency on the Display System Replacement (DSR) Support Systems. Support systems covered in the exam include console test bench, printer control unit, support equipment, and rack mounted processors.

Prerequisites: None
And one of the following: 48244, 43556

88933   DSR, Part II, Primary Systems (DP31B)

Training Manager: AMA-470   Course Length: 12 hour(s)

This exam tests technical proficiency on the Display System Replacement (DSR) Primary Systems. Primary systems covered in the exam include the DSR control room maintenance, local area network (LAN), and rack-mounted processors.

Prerequisites: None
And one of the following: 48244, 43556

88934   DSR, Part III, Backup Systems (DP31C)

Training Manager: AMA-470   Course Length: 12 hour(s)

This exam tests technical proficiency on the Display System Replacement (DSR) backup systems. Backup systems covered in the exam include the backup communications network (BCN) and rack-mounted processors.

Prerequisites: None
And one of the following: 48244, 43556

88935   Tower Data Link Services, Type 2 (TDLS-2) (Dp32)

Training Manager: AMA-480   Course Length: 12 hour(s)

This exam tests proficiency on the Tower Data Link Services, Type -2 (TDLS-2) System.

Prerequisites: 40422
And one of the following: None

88936   ODAPS and OFDPS (DP33)

Training Manager: AMA-470   Course Length: 14 hour(s)

This performance examination measures the proficiency of the technical specialist on the Oceanic Display and Planning System (ODAPS) and Offshore Flight Data Processing System (OFDPS).

Prerequisites: None
And one of the following: None

88937   Stand Alone Weather Sensors (SAWS) (DP34)

Training Manager: AMA-480   Course Length: 5 hour(s)

This performance examination measures the proficiency of the technical specialist on the Stand Alone Weather Sensors (SAWS) System.

Prerequisites: 40428
And one of the following: None

88938   OASIS (DP35)

Training Manager: AMA-480   Course Length: 40 hour(s)

This exam tests proficiency on the Operational Supportability Implementation System (OASIS). Subjects include configuration, system operation, and technical procedures.

Prerequisites: None
And one of the following: None

89000   Automated Radar Terminal System IIA, Type FA-9020 (RP90)

Training Manager: AMA-460   Course Length: 40 hour(s)

Prerequisites: None
And one of the following: None

89001 Automated Radar Terminal System (ARTS) IIIA (RP91)

Training Manager: AMA-460   Course Length: 60 hour(s)

Prerequisites: None
And one of the following: None

89002 RCL High Density Terminal Facility Equipment (RP92)

Training Manager: AMA-440   Course Length: 40 hour(s)

The exam tests proficiency in the RCL high density terminal facility equipment. Subjects include RCL power plant, FR8 Microwave Radio System, DTL 7300 Multiplexing System, Coastcom Channel Bank, Fairchild M505M Microwave MODEM, and the Acorn Network Control System.

Prerequisites: None
And one of the following: None

89003 SSR/DMTI for ARSR 1/2, ARSR 60 and FPS 20 (RP93)

Training Manager: AMA-440   Course Length: 10 hour(s)

Prerequisites: None
And one of the following: None

89004 Air Route Surveillance Radar (ARSR)-3 (RP94)

Training Manager: AMA-440   Course Length: 4 hour(s)

= 980323   crs cancel =   0   tr mgr = AMA-410tr title = Centralized Maintenance System (cms) for csti rcetr d/cst =   0   tr tuition = tr fisc = 260tr reimb =   0   tr reimb n =   0tr ctc hrs = 0   tr prep hr =tr type = 5   tr purp = 2   tr source = 1   tr spec = 0tr admin = replaces 48275. Students can bring a maintenance data terminal and cable if available. ACE recommendation L-1. Desc edit 000928. Tr hrs chg 010831. Desc edit 010927.

Prerequisites: None
And one of the following: None

89005 ASR-9 System (RP95)

Training Manager: AMA-450   Course Length: 51 hour(s)

Prerequisites: None
And one of the following: None

89006 Common Digitizer-2a/B/C/D FA-9971/72/73/74 (RP96)

Training Manager: AMA-440   Course Length: 8 hour(s)

Prerequisites: None
And one of the following: None

89007 Digital Bright Indicator Tower Equipment (DBRITE) (RP97)

Training Manager: AMA-460   Course Length: 6 hour(s)

Prerequisites: None
And one of the following: None

89008 Solid State Radar Beacon Decoder (SSRBD) (RP98)

Training Manager: AMA-440   Course Length: 4 hour(s)

= 20522   crs cancel =   0   tr mgr = AMA-405tr title = a+ certif. preparation hardware fundamentals (compusa)tr d/cst =   0   tr tuition =   tr fisc = 260tr reimb =   0   tr reimb n =   0tr ctc hrs = 0   tr prep hr =tr type = 5   tr purp = 1   tr source = 3   tr spec = 0tr admin = training conducted by compusa. Title & admin edit 020612.

Prerequisites: None
And one of the following: None

89009 Terminal Doppler Weather Radar (RP99)

Training Manager: AMA-440   Course Length: 15 hour(s)

This exam tests proficiency in the TDWR site entry, system MDT logon/logoff, TDWR System, radar product generator/remote and BDD, and safety. Study references are TI's 6560.22, 6560.24, 6560.31, 6560.32, 6560.60, and 6310.20.

Prerequisites: None
And one of the following: None

89010 AN/FPS-117 Minimally Attended Radar (MAR) (RP100)

Training Manager: AMA-440 Course Length: 40 hour(s)

This exam tests proficiency in system coordination, pow er distribution, performance checks, transceiver group, beacon, operational program, system fault analysis, and printed circuit board/line replaceable unit. Study References are TI's 21P6-2FPS117-2,-3,-21-1, -21-3 thru -6, -23-1 thru -4, -26WC-1, TI31S5-4-1516-1, and -13.

Prerequisites: None
And one of the following: None

89011 ARSR-4 (RP101)

Training Manager: AMA-440 Course Length: 16 hour(s)

This exam tests proficiency in system performance checks and maintenance tasks. Study References are order 6340.xx and TI's 6340.23, 6430.24, and 6340.29 thru 6340.38.

Prerequisites: None
And one of the following: None

89012 ARTS IIE Type FA-9020/A (RP102)

Training Manager: AMA-460 Course Length: 60 hour(s)

This exam tests proficiency on the enhanced ARTS IIE Type FA-9020/A System. The exam covers aircraft accident procedures coordination w ith air traffic for release and return of equipment, system familiarity, system operation, and system performance checks and maintenance tasks.

Prerequisites: None
And one of the following: None

89013 Automated Radar Terminal System IIIE (Enhanced) (RP103)

Training Manager: AMA-460 Course Length: 75 hour(s)

This exam tests proficiency on the enhanced ARTS IIIE System. The exam is divided into tw o parts and covers aircraft accidents, coordination w ith air traffic for system release, common processor, tracking processor, ARTS Gatew ay, remote display multiplexer, radar/ARTS interface, system reconfiguration, CDR maintenance (local option), progrm version loading, ARTS IIIE overall system certification, subsystem interface, DIPS, FDAD, operation, and DIPS certification.

Prerequisites: None
And one of the following: None

89014 Mode Select (Mode-S) Beacon System (RP104)

Training Manager: AMA-450 Course Length: 40 hour(s)

This exam tests proficiency on the Mode-S Beacon System. Subject areas covered in the exam include aircraft accident procedures, coordination, facility draw ings, system function and operation, interrogator function and operation, DPS, softw are maintenance functions, CPME, RIT computer, and antenna checks.

Prerequisites: None
And one of the following: None

89015 Micro-EARTS (RP107)

Training Manager: AMA-460 Course Length: 16 hour(s)

This performance examination measures proficiency of the technical specialist on the Micro-EARTS.

Prerequisites: 40607
And one of the following: None

89016 Airport Surface Detection Equipment (ASDE-3) (RP105)

Training Manager: AMA-440 Course Length: 12 hour(s)

This performance examination measures proficiency of the technical specialist on the Airport Surface Detection Equipment (ASDE-3) System.

Prerequisites: None
And one of the following: 40609, 40381

89017 AMASS and TAIU (RP106)

Training Manager: AMA-440 Course Length: 12 hour(s)

This performance examination measures proficiency of the technical specialist on the Airport Movement Area Safety System (AMASS) and the Terminal Automation Interface Unit (TAIU) associated w ith the ASDE-3 System.

Prerequisites: None
And one of the following: 40345, 40609

89018 Weather System Processor (WSP) (RP107)

Training Manager: AMA-450 Course Length: 6 hour(s)

This performance examination measures the proficiency of the technical specialist on the w eather system processor (WSP).

Prerequisites: 40611
And one of the following: None

89800   DME ASII Model 1118 With ERMM (NP100)

Training Manager: AMA-420   Course Length: 8 hour(s)

This exam tests proficiency on the Distance Measuring Equipment (DME) ASII Model 1118 w ith Enhanced Remote Maintenance Monitoring (ERMM). Subjects include operational requirements, measurement, module alignment, and certification requirements.

Prerequisites: None
And one of the following: None

89801   DME ASII Model 1118 Without ERMM (NP101)

Training Manager: AMA-420   Course Length: 6 hour(s)

This exam tests proficiency on the Distance Measuring Equipment (DME) ASII Model 1118 w ithout Enhanced Remote Maintenance Monitoring (ERMM). Subjects include operational requirements, module alignment, and certification requirements.

Prerequisites: None
And one of the following: None